PUBLIC ATTITUDES TOWARD BLACK BEAR IN THE CATSKILLS

BY

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FINAL REPORT

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EXECUTIVE SUMMARY:

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As part of the New York State Department of Environmental Conservation's (DEC) effort to increase the black bear population in the Catskill Region of New York from 1970-1975 levels, and subsequently to stabilize the population at a higher level, DEC asked the Department of Natural Resources, Cornell University, to conduct a survey to determine public attitudes toward black bear. Three publics were surveyed: (1) camp managers (camp directors and campground managers), (2) corporate (business and organizational) landowners, and (3) private (non-corporate) landowners (residents and absentees). Response rates of codeable questionnaires realized for the three publics were as follows: camp survey, 65 percent; corporate survey, 52 percent; and private landowner survey, 72 percent.

The study area was divided into four geographic areas which correspond to DEC's delineation of the bear population ranges existing in the Catskill Region. These were identified as: Northern Occupied Range, Northern Unoccupied Range, Southern Occupied Range, and Southern Unoccupied Range. These ranges included all 138 towns of Albany, Delaware, Greene, Orange, Otsego, Schoharie, Sullivan and Ulster Counties.

Black Bear Hunting

Hunting of black bears to control their population was considered necessary by 30 percent of the camp managers, 43 percent of the corporate representatives, and 40 and 33 percent of resident and absentee landowners, respectively. About one-third of the private landowners were big game hunters and three out of five of these hunters indicated they would shoot a bear if they had the opportunity. Black bear hunting was not allowed on the property of about one-half (52 percent) of the corporations.

Contact with Black Bear

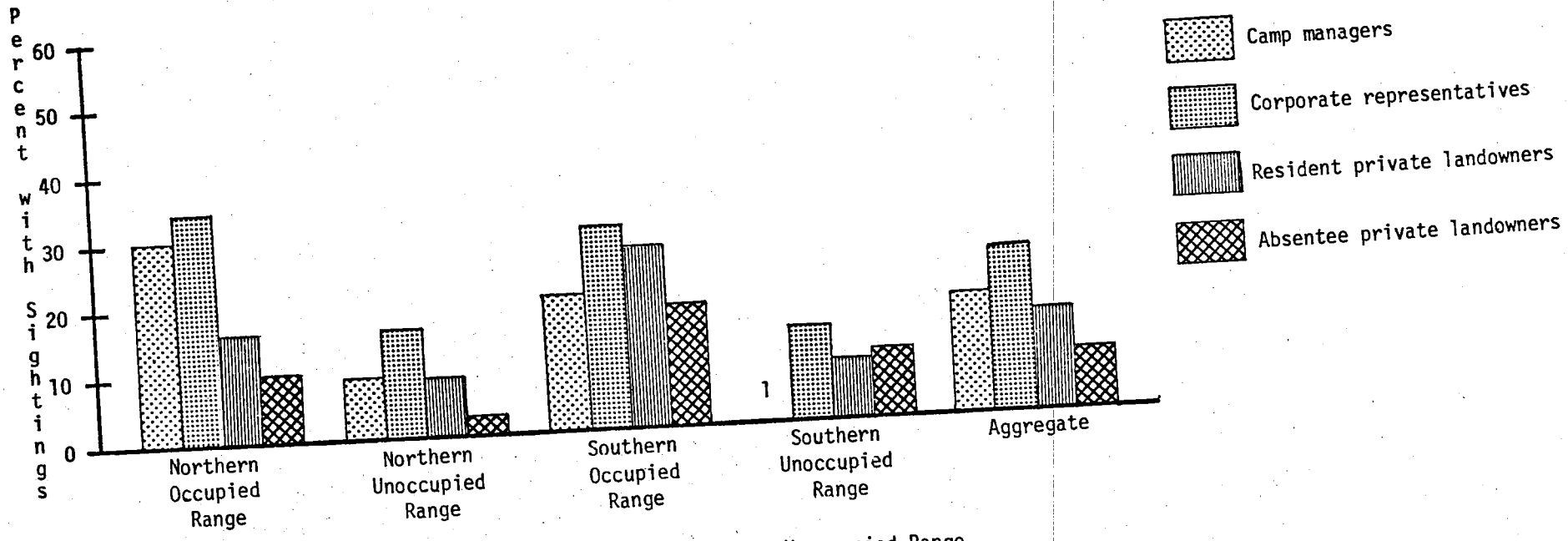
Previous bear sightings on their property were reported by about 18 percent of the camp managers, 24 percent of the corporate representatives, and 15 and 9 percent of resident and absentee landowners, respectively. As expected, previous sightings were reported more frequently in the N. and S. Occupied Ranges than in the N. and S. Unoccupied Ranges (Fig. 1).

Problems from bear were even more infrequent than sightings for all survey audiences. Nuisance problems were reported by 2 percent of the camps, with no human injury or economic loss sustained. Only one corporate landowner had a problem amounting to an estimated $60 of damage. Among private landowners, only 2 percent reported problems from bear. In total, only 27 problems were reported by private landowners. Twelve of these were nuisance problems while the remaining 15 were cases where property damage occurred (6 of these were beehive damage). No cases of human injury were reported. Average estimated monetary loss incurred by these private landowners was about $100 per incident. Twenty of the 27 problems reported by private landowners occurred in the occupied ranges; 21 of the 27 problems were reported by resident landowners.

Attitudes About Black Bear

Approximately 4 out of 5 respondents from each of the three survey audiences did not offer assessments of the trends in the black bear population during the periods from 1960-1970 and 1970-1977. For those respondents of each group who expressed an opinion regarding the factor most limiting the bear population, the availability of food was cited most frequently. The amount of forested land was considered to be of secondary importance.

A plurality of respondents from each of the three survey audiences did not consider themselves adequately familiar with bears to give an opinion on bear behavior. For each survey audience, the greatest proportion of respondents expressing an opinion either believed bears are timid and stay away from



1 Insufficient sample size of camp managers from the Southern Unoccupied Range.

Fig. 1 Bear sightings on property, by bear range and survey audience.

people and residences or believed bears occasionally approach residences but seldom cause damage (Fig. 2).

The extent to which respondents accept the presence of black bears in the Catskills was determined by having them indicate where they would like to have black bears, ranging from "on own property" to either "never" or "in remote areas of the Catskill Mountains." A plurality of corporate and private landowners wanted bears on their own property, while only few camp managers wanted their campers to see bears on or near camp property. The desire never to see a bear or to restrict bear sightings to remote areas of the Catskill Mountains was less prevalent among corporate and private landowners than among camp managers (Fig. 3).

Tolerance of annual nuisance activity from black bears was limited, with monetary loss of $100 or more acceptable to few (less than 10 percent of all three groups). Both annoyance and monetary loss of less than $100 were more acceptable to private landowners than to the remaining two survey audiences (Fig. 4).

Maintaining a population of black bears in the Catskills was considered important by the vast majority of respondents from all three survey audiences, although majority opinion was split in each group regarding how this should be done. While a greater proportion of private landowners than others believed land use regulations should be employed throughout the Catskills to protect black bear habitat, the greatest proportion of each group indicated that an effort to maintain bear should strike a realistic balance between bear habitat requirements and human land use needs (Fig. 5).

When asked if doubling the black bear population would cause an increase in observation of black bears, most respondents indicated "yes." Most corporation representatives and private landowners believed that interest in hunting would increase; camp managers generally disagreed. Except for resident private landowners who felt safety risks would increase, majority opinion for each survey audience was split regarding whether or not doubling the black

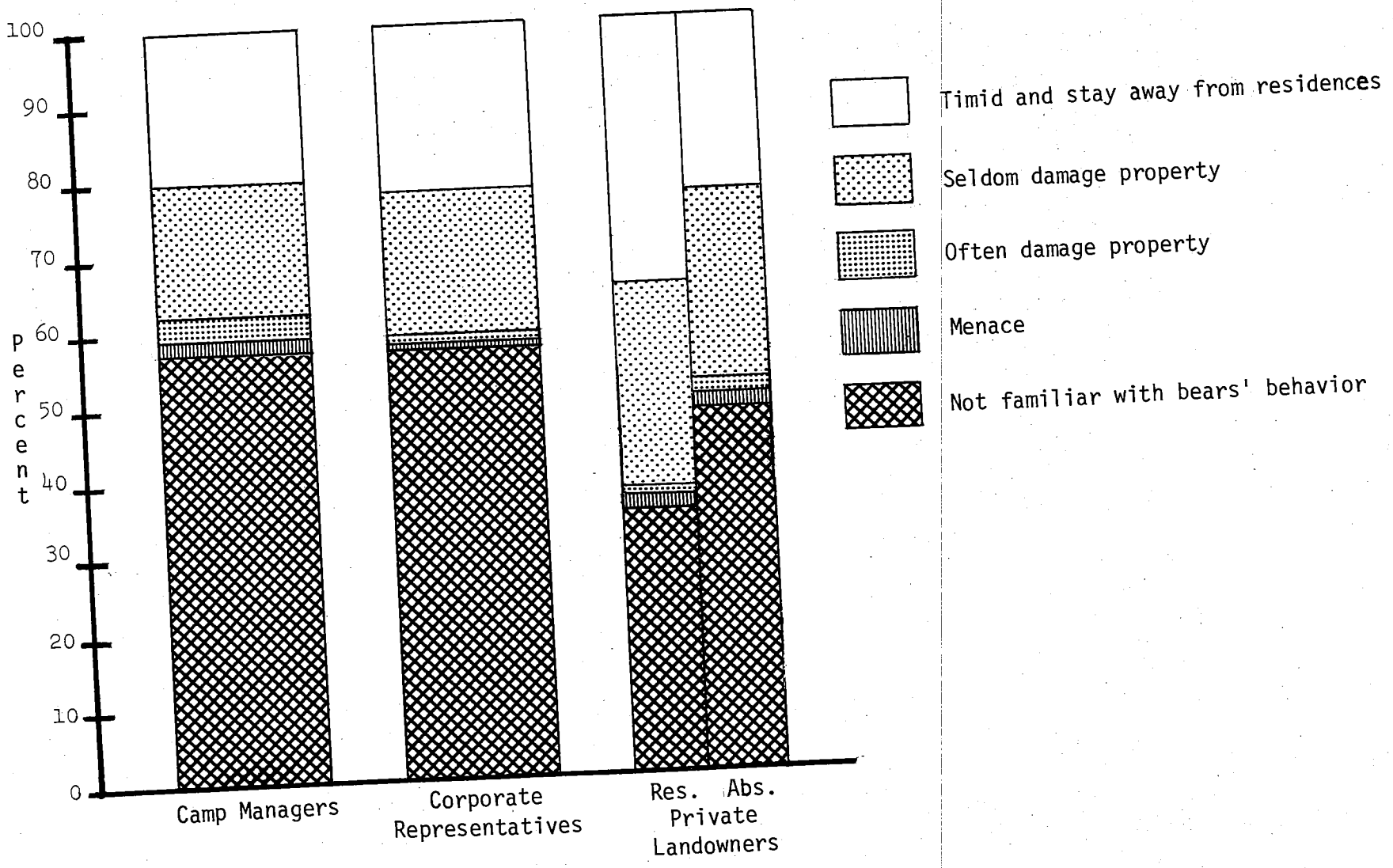


Fig. 2 Attitudes toward bear behavior, by survey audience.

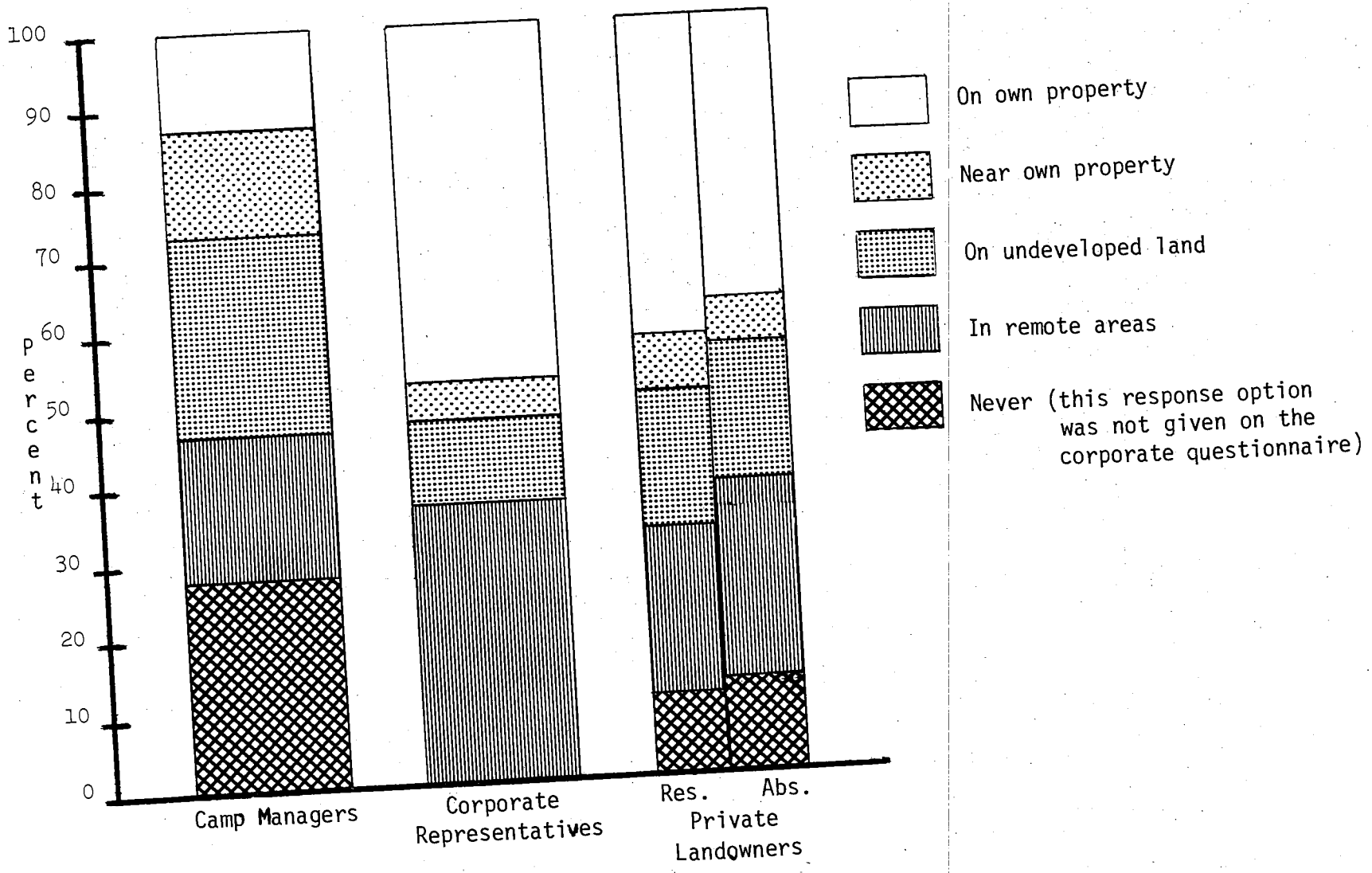


Fig. 3 Areas where bear sightings are desired, by survey audience.

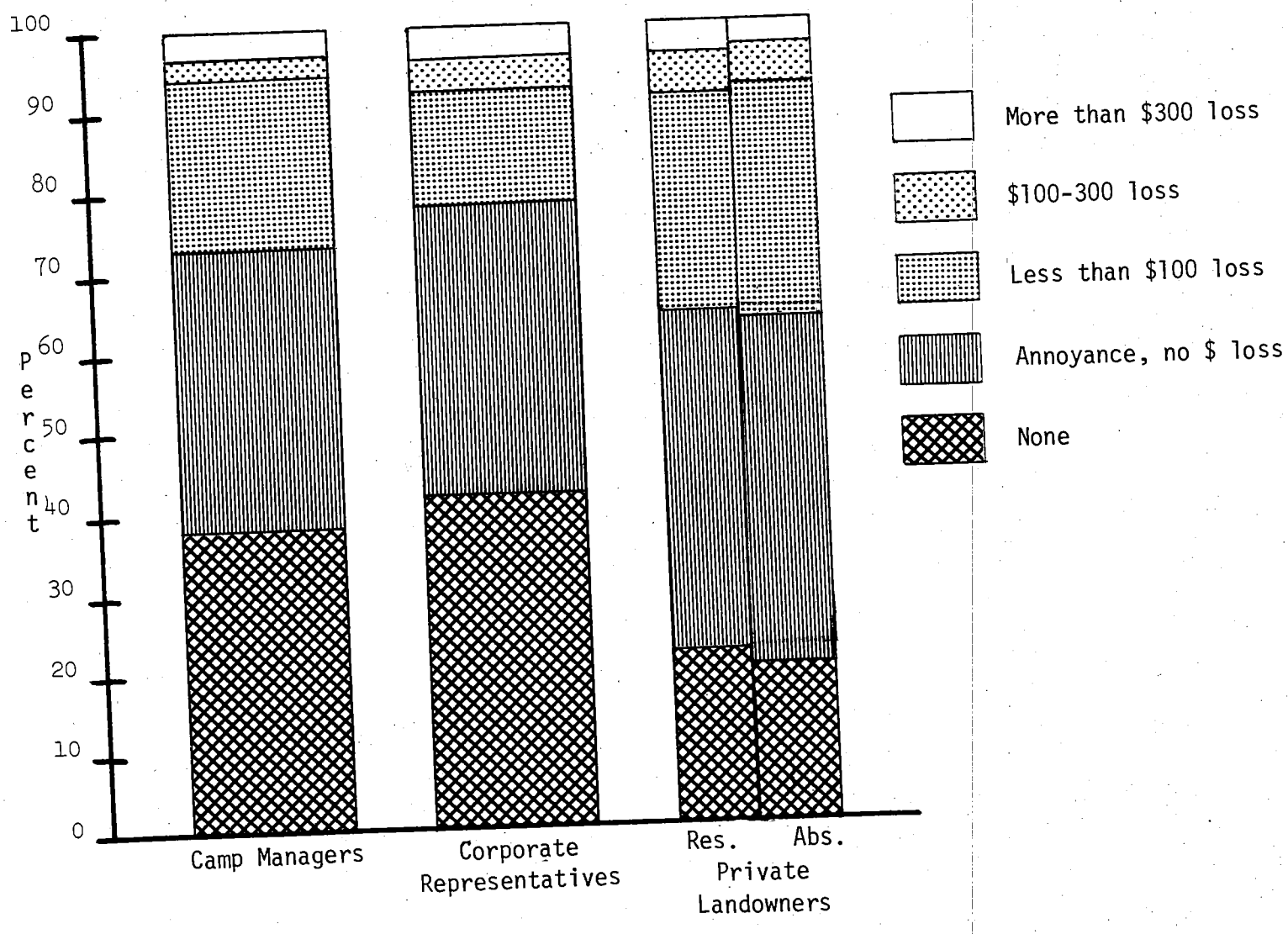


Fig. 4 Level of annual nuisance activity acceptable, by survey audience.

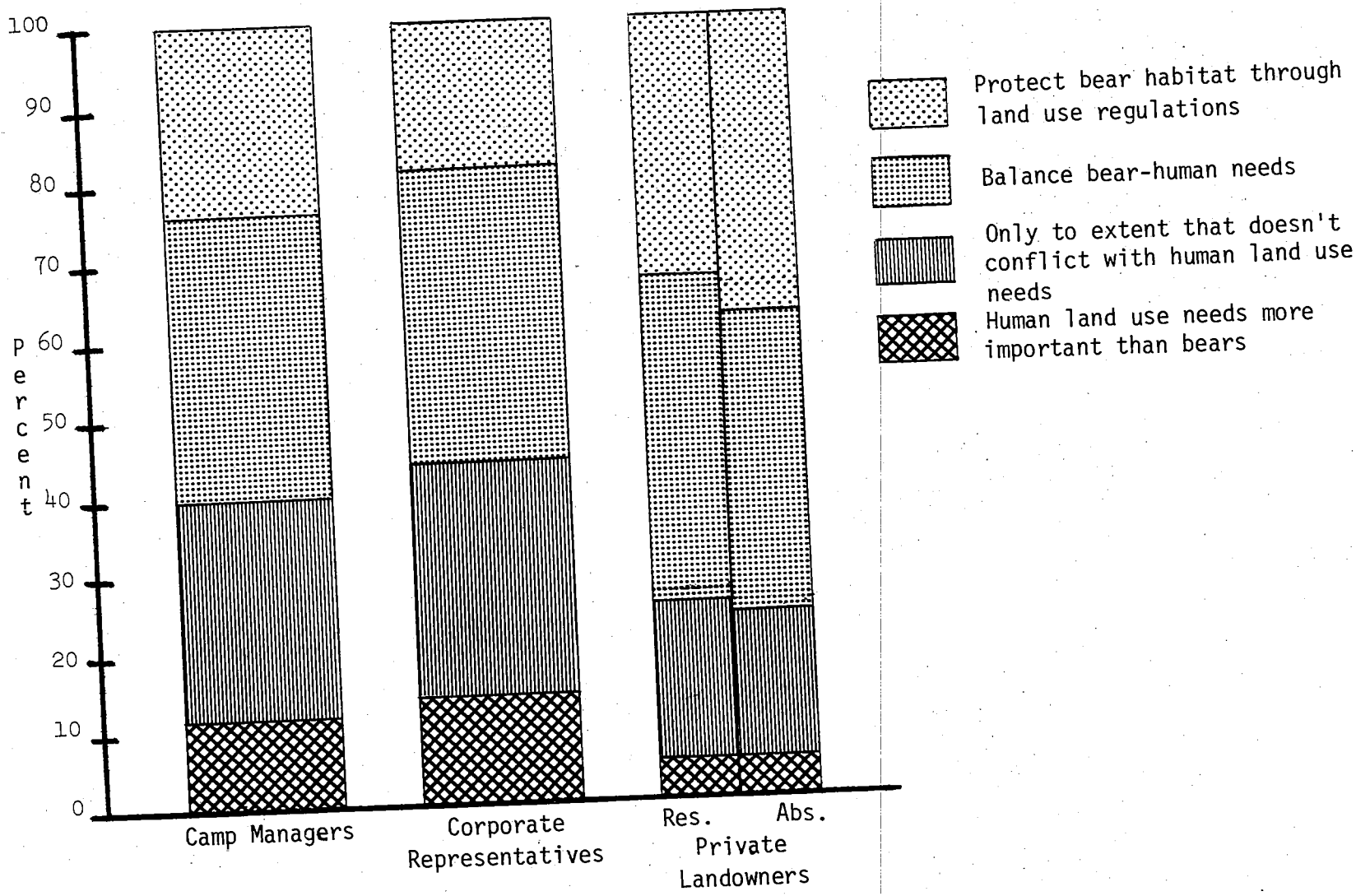


Fig. 5 Importance of maintaining the black bear population, by survey audience.

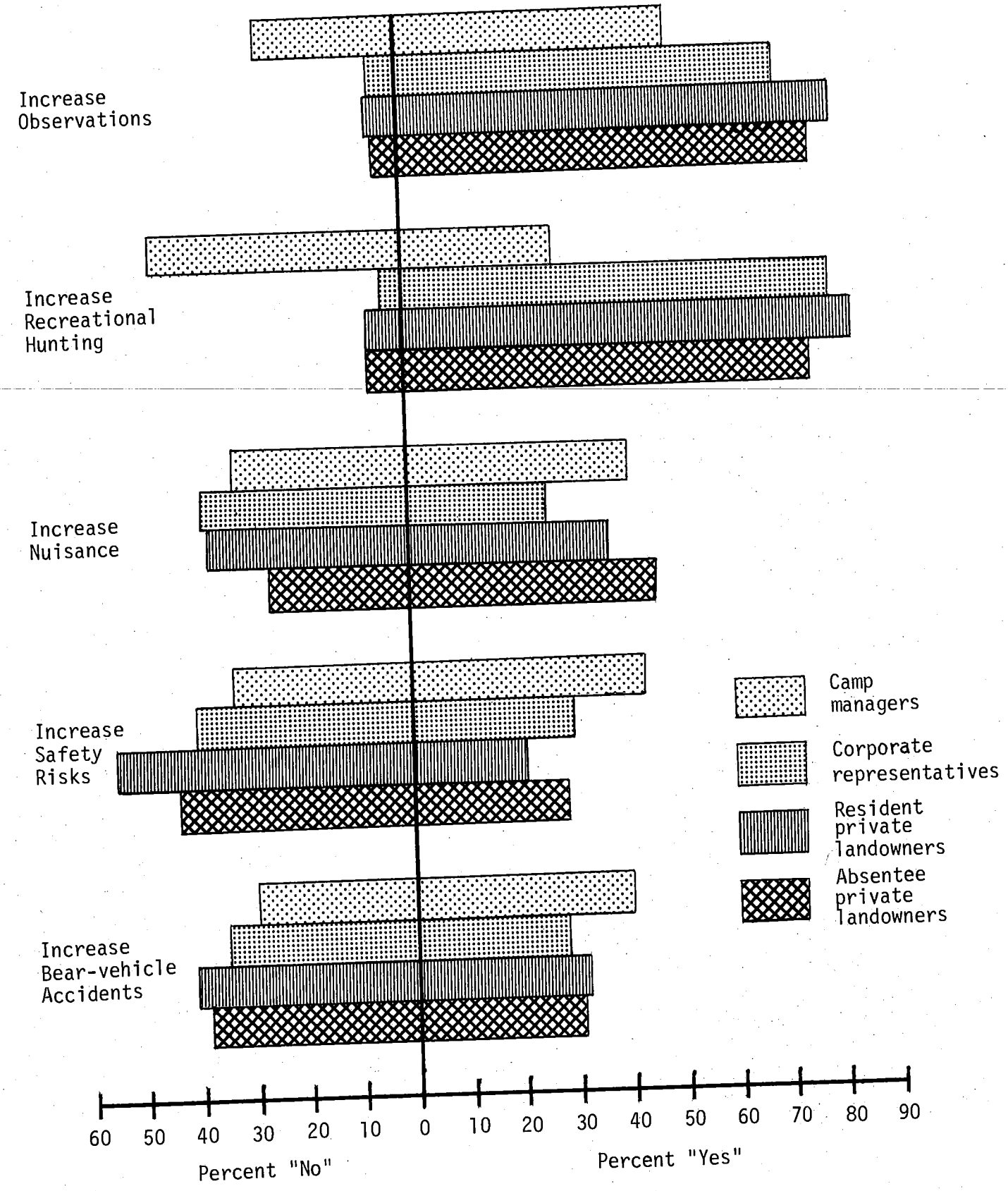


Fig. 6 Opinions on the effects of doubling the Catskill black bear population, by survey audience ("don't know" responses omitted).

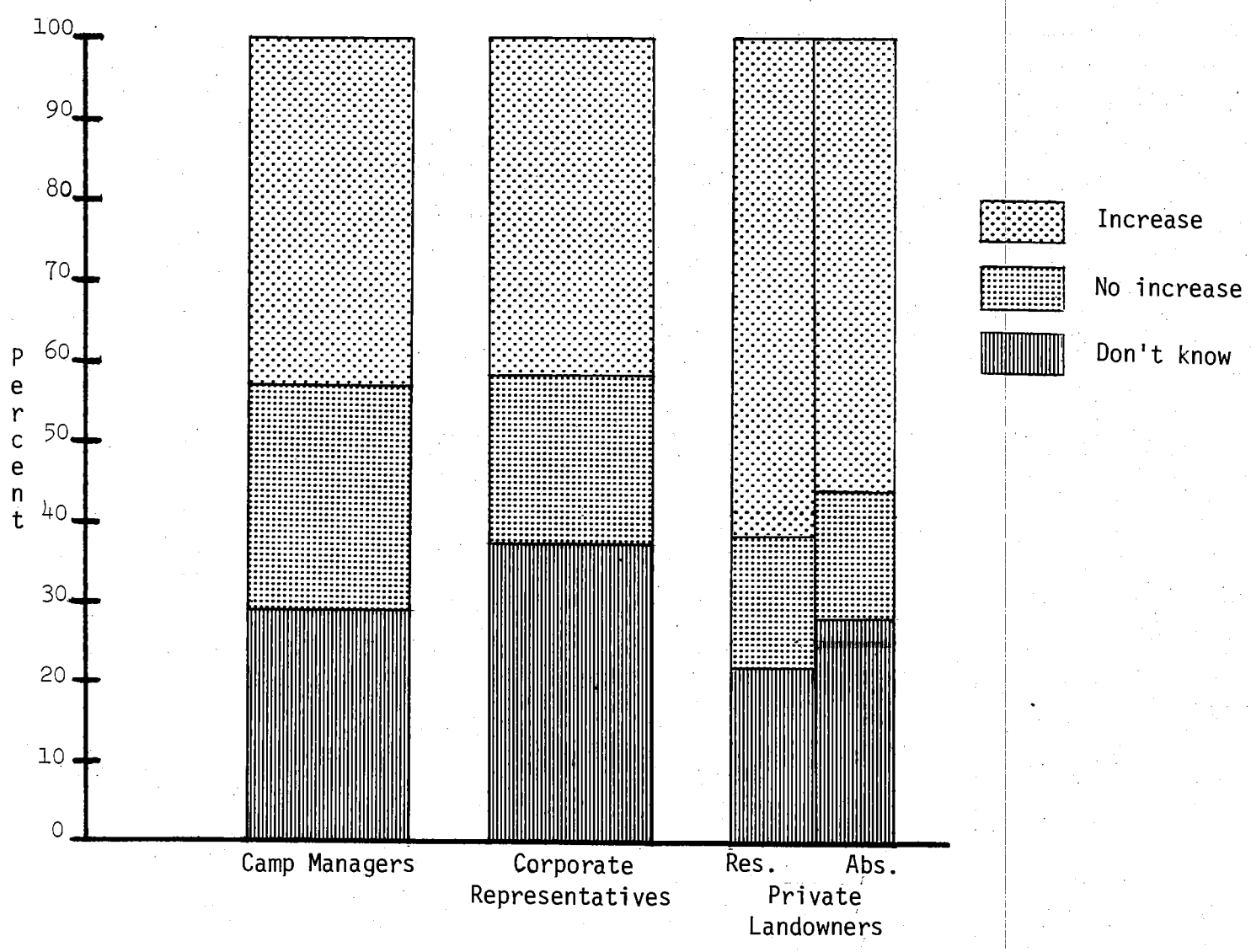


Fig. 7 Future bear population trend desired, by survey audience.

bear population would cause increased bear nuisance situations, increased safety risks, or increased vehicle-bear highway collisions (Fig. 6).

An increase in the bear population was endorsed by the majority of private landowners and by a plurality of both corporate representatives and camp managers (Fig. 7). This pervasively positive attitude toward the black bear population was generally reflected by responses to most attitudinal questions. Further evidence of the minute level of negative impact from black bears was the low incidence of nuisance activity experienced by landowners in the past. Additionally, there was a consistent trend across all three survey audiences for a greater proportion of those who had seen bear vs. those who hadn't to (1) want sightings on or close to their property, (2) have a more positive attitude toward bear behavior, (3) be more tolerant of bear nuisance activity, and (4) want the bear population to increase. The attitudes of these three key groups are indicative of an atmosphere of support for the DEC's efforts to establish and maintain a population of black bear greater than that extant during the period of 1970-1977. Special consideration should be given, however, to those most susceptible to potential problems associated with an increased bear population (e.g. beekeepers).

Another public attitude survey should be conducted once landowners have had experience (potentially) with a larger bear population to determine if the generally positive attitudes identified in this study persist, and to determine the degree to which the incidence of bear nuisance problems increases. Because of the relative homogeneity of responses across all three audiences, it may not be necessary to resurvey more than one audience (e.g. private landowners) to evaluate the impact of a larger bear population.

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BACKGROUND:

In 1970, an ecological study of the black bear population in the Catskill Region was initiated by the Bureau of Wildlife, New York State Department of Environmental Conservation. This study was prompted by the substantial decline in legal hunter take of black bears in the Catskills observed between 1954 and 1969. Assessment of harvest statistics by town, sightings and recovery of tagged bears, and radio-tracking of trapped and instrumented bears revealed the existence of two population concentrations in the Catskills. One population concentration occupied a Norhtern Catskill range (parts of Greene, Delaware, Ulster, and Sullivan Counties), while the other occupied a Southern Catskill range (parts of Sullivan, Orange, and Delaware Counties). The Southern Catskill range represents the extension into southeastern New York of the northeastern Pennsylvania bear range.

Separate analyses of the legal hunter take in each of the two Catskill ranges revealed that the decline observed earlier in the overall black bear take of the entire Catskill Region was a reflection of a particularly sharp decline in the Northern Catskill range. Hunter take in the Southern Catskill range had remained relatively stable since 1954. Between 1970 and 1975, both populations remained relatively stable. It was hypothesized that the stabilized levels were below the range carrying capacity and the number of bears the public would tolerate, given the nature of land uses of the Northern and Southern Catskill bear ranges. Consequently, in the spring of 1976, biologists working on the Catskill Bear Study recommended a moratorium on bear hunting in the Catskills during the 1976 and 1977 big game hunting seasons, with a reopening scheduled for the 1978 hunting season. The objectives of this two-year closure were: (1) to allow a population increase in the Northern Catskill range of between 60 and 80 percent over 1975 levels; (2) to allow a population increase in the Southern Catskill range of about 100 percent; (3) to

stabilize both Catskill bear populations after this two-year closure and (4) to assess public tolerance of this controlled population increase.

To fulfill objective 4, baseline data were needed on the attitudes of various landowning publics toward bear in the Catskills before the new increment of bear became evident in the spring of 1978. Three publics were identified by DEC biologists: (1) camp managers (camp directors and campground managers), (2) corporate (business and organizational) landowners, and (3) private (non-corporate) landowners (both resident and absentee). Camp managers were chosen for study because it was hypothesized that their enterprises had high potential to be affected by bears. Corporate landowners were identified as a key audience because of the vast tracts of land (i.e. bear habitat) controlled by these landowners. Private landowners were chosen because as a group they control the greatest amount of nonpublic lands and because their collective opinions have a great deal of influence on DEC bear management programs. Information sought from these publics included: general attitudes toward black bears, nuisance or damage incidents involving black bears, sightings of bears, and tolerance of black bears.

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O'Pezio, J. and S.H. Clarke. 1976. Recommendations for the Catskill black bear hunting season, 1976-1978. Attached mimeo in O'Pezio, J. 1976. Preparation of a management plan for the Catskill black bear resource. Pittman-Robertson Job Performance Report, W-89-R-20: X-6 (New York).

PROCEDURES:

The eight counties in the study area were divided into four strata, determined by bear range characteristics (Clarke and O'Pezio, 1977). These were identified as:

Northern Occupied Range
Northern Unoccupied Range
Southern Occupied Range
Southern Unoccupied Range

These ranges included all or parts of Albany, Delaware, Greene, Orange, Otsego, Schoharie, Sullivan and Ulster Counties, encompassing 138 towns in the Catskill Region (Fig. 8; Appendix A).

The questionnaires (Appendix B) developed for each survey audience covered basically the same topics and included background, informational, and attitudinal questions. The standard mailing procedure which utilizes 4 mailings was used in each survey. The dates for each mailing are shown in Table 1.

Table 1. MAILING CHRONOLOGY

Mailing	Camp Managers	Corporate Landowners	Private Landowners
	Mailing Dates		
First mailing- questionnaire and letter	4/13/78	5/23/78	4/18/78
Second mailing- letter	4/21/78	6/2/78	4/25/78
Third mailing- questionnaire and letter	5/11/78	6/15/78	5/9/78
Fourth mailing- letter	5/19/78	6/22/78	5/17/78

Questionnaires were coded and keypunched as they were received. Data analysis was accomplished using the Statistical Package for the Social Sciences (SPSS) computer program. Data were analyzed by bear range (where sample size permitted)

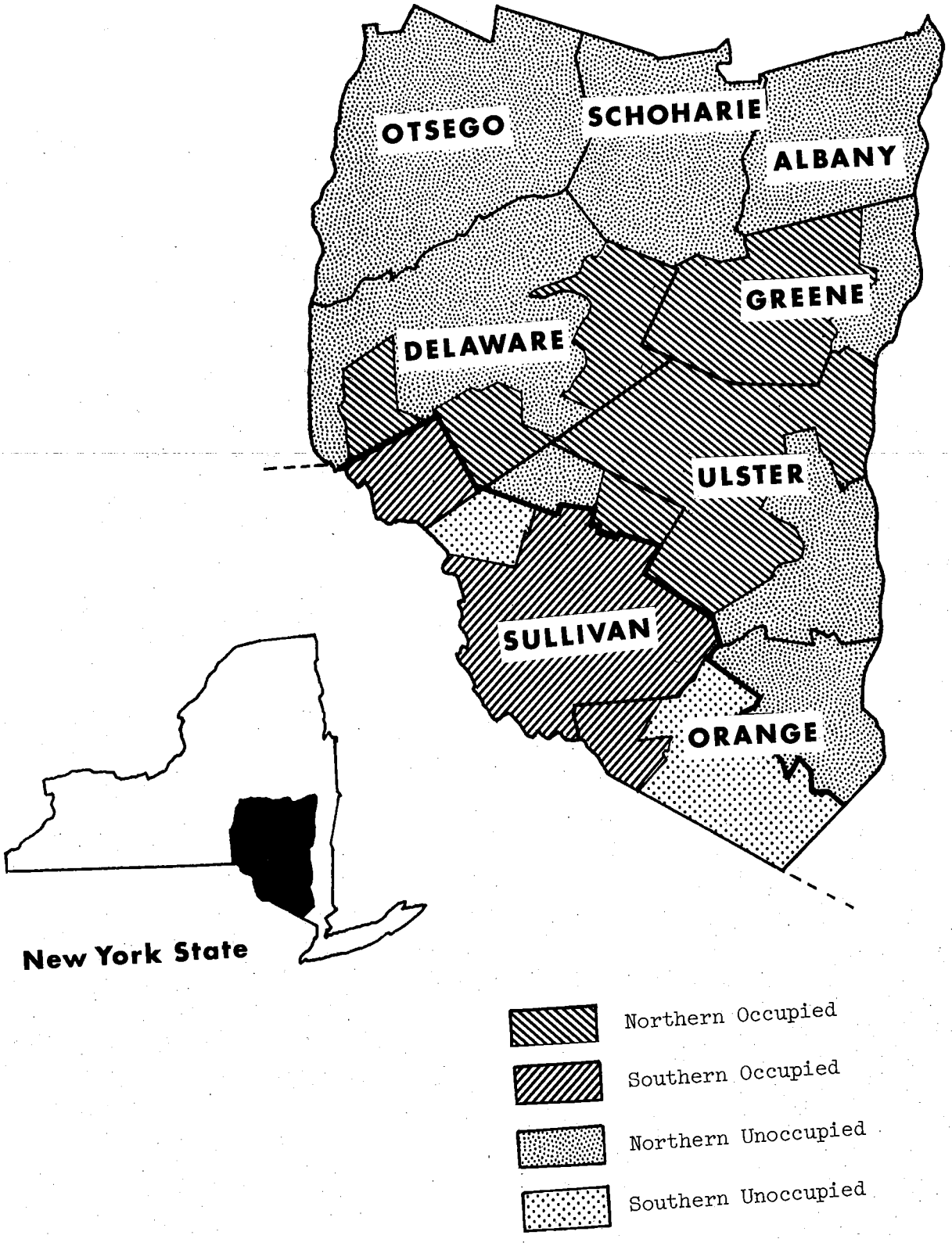

Fig. 8 Catskill black bear range components, by political boundaries.

and by the aggregate response of each survey audience. Additionally, private landowners were categorized by resident-absentee designation. Chi-square analysis and t-tests were employed where appropriate. The $p \geq .95$ level of significance was used throughout to designate "significant" differences.

Camp Manager Survey

Names and addresses of camp managers (managers or directors) of all active (1977) recreational vehicle and organizational camps in the study area were obtained from New York State Department of Health mailing lists. The initial survey size, number of nondeliverable questionnaires, and response rates by bear range are shown in Table 2.

Table 2. RESPONSE FOR CAMP MANAGER SURVEY, BY BEAR RANGE

Bear Range	Survey Size	Number Non-deliverable	Response Codeable	Percent Responding
Northern Occupied	106	8	64	65.3
Northern Unoccupied	116	7	82	75.2
Southern Occupied	154	12	86	60.6
Southern Unoccupied	18	1	5	29.4
TOTAL	394	28	237	64.8

The camp manager survey had 28 nondeliverable questionnaires, reducing the sample to 366. Of those, 246 were returned (67.2 percent). There were 237 codeable questionnaires, resulting in a 65 percent useable return rate.

Due to the low response and small survey size of the Southern Unoccupied range, a telephone follow-up was conducted among nonrespondents (the questionnaire used can be found in Appendix B). Of the 12 possible nonrespondents, 7 cooperated in the telephone interview and 5 could not be reached.

Corporate Landowner Survey

Samples of corporate (business or organizational) landowners were drawn systematically from the tax rolls for each bear range. The sample was geographically distributed by town, with approximately equal numbers of corporate landowners drawn from each town within a bear range.

The following criteria were developed by Bureau and project staff for use in the corporate landowner sample selection:

1. Eliminate parcels in villages and cities - Where tax records for cities and villages are kept separate from other parcels in towns, eliminate them from sampling procedure (e.g. Albany, Kingston, etc.)

2. Eliminate all other parcels of less than 50 acres, regardless of address (e.g. even if it is known to be a rural address)

3. Corporate names and business names will be considered the same - The words incorporated, corporation or company need not be included if it is obvious that a business rather than a private individual is the landowner.

4. Eliminate private camps - These are part of the campground survey population and should be excluded from this sample selection whenever they are identified.

5. Eliminate agricultural concerns - (i.e. farmers). These are part of private landowner population and should be excluded from this sample selection whenever they are identified.

6. Eliminate hunting clubs - Corporation names clearly indicating hunting clubs will be omitted, whenever identified.

7. Eliminate state-owned land, special franchises, utilities, and railroads - Where private landowners are not given a separate listing from the above categories, landowners falling into those categories should be omitted.

8. Landowners in the wholly exempt category may be included - Churches colleges, etc. that meet criteria 1 and 2 above may be included. (Note: Often only the name of wholly exempt landowners were present on tax roles; addresses or size of landholdings were not always available).

Due to the variation in number of towns, the actual sampling that resulted was as shown in Table 3. During the sample selection process it was often found that even a census of all corporate landowners did not fill the quota, resulting in fewer corporate landowners sampled than originally planned.

Table 3. RESPONSE FOR CORPORATE LANDOWNER SURVEY, BY BEAR RANGE

Bear Range	Number of Towns	Actual Sample Size	Number Non-deliverable	Responses Codeable	Percent Responding
Northern Occupied	26	162	11	88	58.3
Northern Unoccupied	87	204	18	88	47.3
Southern Occupied	14	145	13	78	59.1
Southern Unoccupied	11	136	20	49	42.2
Unknown	-	-	-	2	-
TOTAL	138	647	62	305	52.1

The corporate landowner survey had 62 nondeliverable questionnaires, reducing the sample size to 585. Of those, 321 were returned (54.9 percent). There were 305 codeable questionnaires, resulting in a 52 percent useable return rate.

Private Landowner Survey

Samples of approximately 550 landowners (275 resident, 275 absentee) were to be systematically drawn from the tax rolls for each bear range. The sample was geographically distributed by town, with approximately equal numbers of both resident and absentee landowners drawn from each town within a bear range. Due to the attempt to obtain equal numbers of resident and absentee landowners, and because of the variation in number of towns, the actual sampling that resulted differed slightly from that proposed.

The following criteria were developed by Bureau and project staff to use in the private landowner sample selection:

General

1. Eliminate parcels in cities and villages - Where tax records for cities and villages are kept separate from other parcels in towns, eliminate them from sampling procedure (i.e. Albany, Kingston, etc.).

2. Eliminate parcels with street addresses if they have less than 10 acres - Addresses which are indicative of a village or city (streets, avenues, places, etc.) and have parcels of less than 10 acres should not be selected.

3. Eliminate rural parcels of less than one acre - If the parcel address is not indicative of a municipality (road or rural delivery), use a one acre minimum size for sample selection (realizing that some rural landowners may be excluded and some individuals in a municipality having a road address and one acre or more may be included).

Absentee-Resident Landowner Stratification

1. One-half of the sample names drawn for each town should be "resident" landowners, one-half should be "absentee" landowners.

2. A landowner is considered "absentee" if the mailing address for the tax bill is outside the geographic stratum being considered. This includes addresses in municipalities that are within the general region the stratum encompasses, since municipalities are technically not in the study area.

3. Landowners with a mailing address (for the tax bill) in the same stratum as their land are "residents" for this study.

During the sample selection process, it was found that the preset quotas could not always be met exactly. The actual samples drawn for resident and absentee landowners in each bear range and the response rates are as shown in Table 4.

The landowner survey had 162 nondeliverable questionnaires, reducing the sample size to 2,161. Of these, 1,591 were returned (74 percent). There were 1,552 codeable questionnaires, resulting in a 72 percent useable return rate. No significant differences ($p \geq .95$) were found in the proportion of resident or absentee responses occurring from each range (Table 5).

Table 4. RESPONSE FOR PRIVATE LANDOWNER SURVEY, BY BEAR RANGE AND RESIDENT-ABSENTEE DESIGNATION

Bear Range	Number of Towns	Actual Sample Size	Number Non-deliverable	Responses Codeable	Percent Responding
RESIDENT					
Northern Occupied	26	285	19	188	70.7
Northern Unoccupied	87	345	11	249	74.6
Southern Occupied	14	266	15	196	78.1
Southern Unoccupied	11	264	13	172	68.5
TOTAL	138	1,160	58	805	73.0
ABSENTEE					
Northern Occupied	26	286	19	199	74.5
Northern Unoccupied	87	347	26	234	72.9
Southern Occupied	14	266	26	167	69.6
Southern Unoccupied	11	264	33	144	62.3
TOTAL	138	1,163	104	744	70.3
AGGREGATE					
Northern Occupied	26	571	38	387	72.6
Northern Unoccupied	87	692	37	483	73.7
Southern Occupied	14	532	41	363	73.9
Southern Unoccupied	11	528	46	316	65.6
Unknown	-	-	-	3	-
TOTAL	138	2,323	162	1,552	71.7

Table 5. PERCENTAGE OF RESIDENT AND ABSENTEE LANDOWNERS, BY BEAR RANGE

Bear Range	Resident	Absentee	Total
	Percent		N
Northern Occupied	48.6	51.4	387
Northern Unoccupied	51.6	48.4	483
Southern Occupied	54.0	46.0	363
Southern Unoccupied	54.4	45.6	316
TOTAL	52.0	48.0	1,549

FINDINGS AND ANALYSIS:

CAMP MANAGER SURVEY[1]

Characteristics of Camps

The majority of camps (59 percent) were organizational rather than recreational vehicle campgrounds. In the N. Occupied and N. Unoccupied ranges about half were recreational vehicle and half were organizational, whereas in the S. Occupied range, about 70 percent were organizational. More organizational than recreational vehicle camps had 100 or more campers present during their peak season (Table C-1).[2] Most recreational vehicle campgrounds (91 percent) indicated they served people of all ages, while organizational camps reported that the primary age group they served was youngsters 10 to 15 years old (Table C-2). Recreation was indicated as the primary objective of 47 percent of the camps overall; however, recreation was reported more frequently by recreational vehicle camps than by organizational camps (83 vs. 22 percent) (Table C-3).

Two-thirds of the camps in the N. Occupied and S. Occupied ranges were located in forested, rural areas, while less than half of those in the N. Unoccupied range were located in such areas (Table C-4).

Awareness of the presence of black bears in the Catskills by campers was not considered very widespread by camp managers;[3] two-thirds believed that

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[1]Due to the small number of campgrounds in the S. Unoccupied range and the low response rate from that range, a telephone follow-up of nonrespondents was conducted. Except for the few specific questions asked on that follow-up, data from the S. Unoccupied range are not reported in the text separately; they are included in the aggregate statistics. The numbers appearing in parentheses for the S. Unoccupied range are number of respondents, not percents.

[2]Tables prefixed with a letter refer to tables in the Appendix designated by that letter.

[3]Respondents to this survey will be referred to as "camp managers" in the text and tables.

most of their campers were not aware of the presence of black bears in the Catskills (Table 6). Nevertheless, 12 percent had campers actually report seeing a bear at their camp in 1977. About 16 percent of the respondents from the N. Occupied range, 13 percent from the N. Unoccupied range, 10 percent from the S. Occupied range and 9 percent from the S. Unoccupied range had campers report seeing a bear at their camp in 1977 (Table 7).

Table 6. CAMPERS' AWARENESS OF BEARS IN THE CATSKILL REGION, AS ESTIMATED BY CAMP MANAGERS, BY BEAR RANGE

Bear Range	Most Campers Not Aware of Bear	Most Campers Are Aware of Bear	Don't Know About Campers' Awareness of Bear	Total N
	Percent			
Northern Occupied	65.6	25.0	9.4	64
Northern Unoccupied	54.9	24.4	20.7	82
Southern Occupied	76.5	11.8	11.8	85
Southern Occupied	(4)	(1)	(0)	5
TOTAL	66.1	19.9	14.0	236

Table 7. CAMPER BEAR SIGHTINGS, REPORTED BY CAMP MANAGERS, BY BEAR RANGE

Bear Range	Camper Bear Sightings: Percent of Camps Without Bear Sightings	Camper Bear Sightings: Percent of Camps With Bear Sightings	Camper Bear Sightings: Mean Number of Camper Sightings[a]	Total N
Northern Occupied	84.2	15.8	.211	57
Northern Unoccupied	86.8	13.2	.265	68
Southern Occupied	90.4	9.6	.164	73
Southern Unoccupied[b]	(11)	(1)	(.083)	12
TOTAL	87.4	12.4	.205	210

[a] Includes all numeric responses, of all respondents, not just those with camper sightings.

[b] Includes telephone follow-up responses.

Black Bear Hunting

Hunting of black bears to control their population was considered necessary by 30 percent of the camp managers, unnecessary to 25 percent, and 45 percent did not know if hunting was necessary. Respondents from the N. Occupied range were most inclined to believe hunting was necessary, while those from the S. Occupied range were least inclined to consider hunting necessary (Table 8).

Table 8. ATTITUDES OF CAMP MANAGERS TOWARD HUNTING TO CONTROL THE BLACK BEAR POPULATION, BY BEAR RANGE

Bear Range	Percent Who Consider Hunting Necessary	Percent Who Do Not Consider Hunting Necessary	Percent Who Did Not Know if Hunting Was Necessary	Total N
Northern Occupied	42.2	20.3	37.5	64
Northern Unoccupied	31.6	24.1	44.3	79
Southern Occupied	19.8	29.6	50.6	81
Southern Unoccupied	(0)	(1)	(4)	5
TOTAL	29.7	24.9	45.4	229

Contact With Black Bears

Sightings of black bears in the Catskills by camp managers were uncommon, the majority (70 percent) indicating they had never seen a black bear in the Catskills (Table 9). About 8 percent saw one in 1977, 13 percent saw one in 1976, and 21 percent saw one sometime before 1976. More respondents from the Occupied ranges than from the Unoccupied ranges indicated they had seen a bear, and the mean numbers of bear sightings during 1977 and 1976 were greater in the Occupied ranges (Table 10). A majority of respondents who reported seeing a bear also reported bear sightings on their camp property (Table 9).

Previous problems from bear at their camp were reported by only 2 percent of the respondents (Table C-5). These were all nuisance problems; no incidents of human injury or economic loss were reported. The greatest incidence of problems was reported from the S. Occupied bear range, where 5 percent of camp managers reported having problems at some time, although no problems were reported for 1977 in this area. The N. Unoccupied range was the only area where a problem was reported for 1977.

Table 9. PERSONAL BEAR SIGHTINGS REPORTED BY CAMP MANAGERS, BY YEAR OF SIGHTING AND BEAR RANGE

Bear Range	Percent With Personal Sighting[a]	Percent with Personal Sighting Anywhere, by Year			Percent with Personal Sighting on Own Property Any Year	Percent with Personal Sighting on Own Property, by Year			Total N
		in 1977	in 1976[b]	prior to 1976		in 1977[c]	in 1976[d]	prior to 1976	
Northern Occupied	40.6	14.1	18.8	23.4	29.7	14.1	12.5	18.8	64
Northern Unoccupied	19.5	4.9	3.7	17.1	8.5	2.4	1.2	7.3	82
Southern Occupied	34.5	8.3	19.0	25.0	19.8	6.0	14.3	14.5	84
Southern Unoccupied[e]	(1)	(0)	(0)	(1)	(0)	(0)	(0)	(1)	12
TOTAL	29.8	7.9	12.8	21.1	18.1	6.6	8.7	12.8	242

[a] χ^2 test is significant at $p \geq .95$, for those from the N. Occupied, N. Unoccupied, and S. Occupied ranges who "have vs. have not seen a bear in the Catskills." Only percent with personal sightings is given in the table.

[b] χ^2 test is significant at $p \geq .95$, for those from the N. Occupied, N. Unoccupied, and S. Occupied ranges who "saw vs. did not see a bear in 1976 in the Catskills."

[c] χ^2 test is significant at $p \geq .95$, for those from the N. Occupied, N. Unoccupied, and S. Occupied ranges who "saw vs. did not see a bear on their own property in 1977."

[d] χ^2 test is significant at $p \geq .95$, for those from the N. Occupied, N. Unoccupied, and S. Occupied ranges who "saw vs. did not see a bear on their own property in 1976."

[e] Includes telephone follow-up.

Table 10. MEAN NUMBER OF PERSONAL BEAR SIGHTINGS PER CAMP MANAGER, BY YEAR OF SIGHTING, PROPERTY OWNERSHIP AND BEAR RANGE

Bear Range	Sighted Anywhere[a]			Sighted on Own Property[a]		
	Mean Number of Sightings in 1977	Mean Number of Sightings in 1976	Total N	Mean Number of Sightings in 1977	Mean Number of Sightings in 1976	Total N
Northern Occupied	.281	.250	64	.270	.125	63
Northern Unoccupied	.061	.037	82	.037	.012	82
Southern Occupied	.108	.398	83	.095	.321	84
Southern Unoccupied	.000	.000	5	.000	.000	5
TOTAL	.137	.222	234	.120	.153	234

[a] Includes all respondents; those without sightings included as 0.

Attitudes About Black Bears

Assessments of the trends in the black bear population during the periods 1960-1970 and 1970-1977 were not offered by the majority of camp managers (85 and 81 percent, respectively) (Table 11). For those who indicated a trend, most believed the bear population had decreased from 1970-1977; this attitude was especially prevalent among respondents from the N. Occupied bear range. The availability of food was considered the most important limiting factor for bears by the greatest proportion of respondents (37 percent) (Table 12). Hunting and the amount of forested land were considered most important by 15 and 14 percent, respectively.

Table 11. CAMP MANAGERS' ASSESSMENTS OF BEAR POPULATION TRENDS, BY BEAR RANGE

Bear Range	Assessments of 1960-1970 Bear Population Trend				Total N
	Increased	Remained the Same	Decreased	Don't Know	
	Percent				
Northern Occupied	3.4	6.9	12.1	77.6	58
Northern Unoccupied	0.0	6.0	4.5	89.6	67
Southern Occupied	2.8	8.5	4.2	84.5	71
Southern Unoccupied	(0)	(0)	(0)	(5)	5
TOTAL	2.0	7.0	6.5	84.6	201

(cont'd)

Table 11 (cont'd). CAMP MANAGERS' ASSESSMENTS OF BEAR POPULATION TRENDS, BY BEAR RANGE

Bear Range	Assessments of 1970-1977 Bear Population Trend				Total N
	Increased	Remained the Same	Decreased	Don't Know	
	Percent				
Northern Occupied	3.4	6.8	15.3	74.5	59
Northern Unoccupied	3.0	1.5	7.5	88.0	67
Southern Occupied	6.9	5.6	9.7	77.8	72
Southern Unoccupied	(0)	(0)	(0)	(5)	5
TOTAL	4.4	4.4	10.3	80.9	203

Table 12. FACTORS CAMP MANAGERS BELIEVED WERE LIMITING THE BEAR POPULATION, BY BEAR RANGE

Bear Range	Limiting Factor					Total N
	Amount of Forest Land	Availability of Food	Human Contact	Hunting	Other[a]	
	Percent					
Northern Occupied	11.1	42.6	7.4	16.7	22.2	54
Northern Unoccupied	15.5	36.5	9.9	11.3	26.8	71
Southern Occupied	15.2	33.2	9.1	15.2	27.3	66
Southern Unoccupied	(0)	(2)	(0)	(2)	(0)	4
TOTAL	13.8	37.4	8.7	14.9	25.1	195

[a] Includes multiple responses and "don't know" responses.

Attitudes about the behavior of bears had not been formed by the majority of camp managers; 57 percent indicated they were not adequately familiar with bears to state an opinion. About 20 percent believed black bears are timid and stay away from campers and other people; 18 percent thought bears occasionally approach camps but seldom cause damage; few thought bears often cause damage (3 percent) or are a menace (2 percent). A plurality of respondents from each range indicated they were not familiar with black bears. Respondents from the N. Occupied range were most inclined to consider bears timid (Table 13).

Table 13. CAMP MANAGERS' ATTITUDES TOWARD BEAR, BY BEAR RANGE

Bear Range	Attitude					Total N
	Bears Are Timid	Bears Seldom Damage	Bears Often Damage	Bears are a Menace	Not Familiar with Bears	
	Percent					
Northern Occupied	27.9	18.0	4.9	3.3	45.9	61
Northern Unoccupied	20.7	17.1	2.4	2.4	57.4	82
Southern Occupied	15.7	20.5	1.2	0.0	62.6	83
Southern Unoccupied	(0)	(0)	(0)	(0)	(5)	5
TOTAL	20.3	18.2	2.6	1.7	57.1	231

The desirability of black bear sightings by campers, as assessed by management, varied considerably. While 29 percent of the respondents indicated no interest in having their campers ever see a bear in the wild, most others wanted their campers to see bear occasionally on undeveloped land (26 percent)

or in remote areas of the Catskill Mountains (19 percent). About 13 percent of the camp managers wanted their campers to see a bear occasionally at their camp and 14 percent wanted them to see bear near but not on camp property. Responses from the three bear ranges varied little (Table 14).

Table 14. AREAS WHERE CAMP MANAGERS BELIEVE CAMPERS SHOULD BE ABLE TO SEE BEAR, BY BEAR RANGE

Bear Range	Areas					Total N
	On Camp Property	Near Camp Property	On Undeveloped Lands	In Remote Areas	Never	
	Percent					
Northern Occupied	11.3	14.5	27.4	16.1	30.7	62
Northern Unoccupied	14.8	12.3	28.4	19.8	24.7	81
Southern Occupied	12.0	14.5	22.9	20.5	30.1	83
Southern Unoccupied	(0)	(1)	(2)	(0)	(2)	5
TOTAL	12.6	13.9	26.4	18.6	28.6	231

Nuisance activity from black bears would not be acceptable to 38 percent of the camp managers, but many others indicated tolerance for occasional annoyance (36 percent) or economic loss of under $100 (21 percent). Very few respondents (6 percent) would tolerate nuisance resulting in economic loss over $100. Respondents from each range demonstrated this same general trend; however, those from the S. Occupied range were most tolerant of economic loss (Fig. 9; Table C-6).

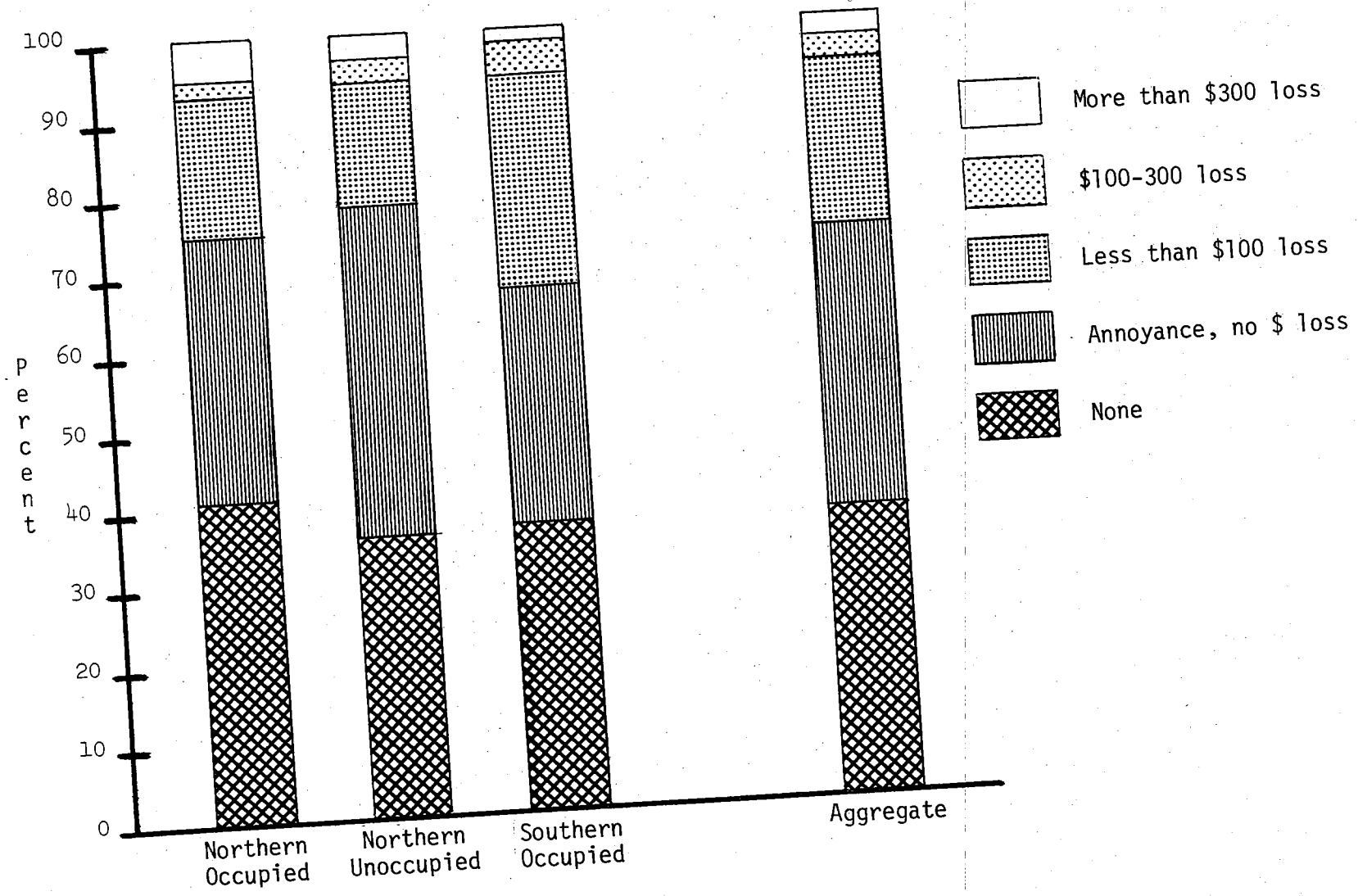

Fig. 9 Level of annual nuisance activity acceptable to camp managers, by range.

Maintaining a population of black bears in the Catskills was important to most camp managers (88 percent). Nearly one-quarter thought that land use regulations should be employed throughout the Catskills to protect bear habitat; a greater proportion of respondents from the S. Occupied range than from other ranges indicated this. The greatest proportion of respondents (36 percent) believed that maintenance of the black bear population should be achieved through a balance of human land use needs and black bear habitat requirements; this attitude was most prevalent in the N. Occupied range. About 28 percent believed that maintenance of bear is important, but only to the extent that considerations for bear do not conflict with human land use needs. Only 12 percent indicated that human land use needs for bear habitat are more important than bears (Table 15).

Table 15. IMPORTANCE TO CAMP MANAGERS OF MAINTAINING THE BLACK BEAR POPULATION, BY BEAR RANGE

Bear Range	Importance Indicator: Protect Bear Habitat Through Land Use Regulations	Balance of Bear and Human Needs	Only to Extent that It Doesn't Conflict with Human Land Use Needs	Human Land Use Needs Are More Important Than Bears	Total N
	Percent				
Northern Occupied	15.3	38.9	33.9	11.9	59
Northern Unoccupied	22.4	44.7	21.1	11.8	76
Southern Occupied	32.1	25.6	29.5	12.8	78
Southern Occupied	(0)	(2)	(1)	(1)	4
TOTAL	23.5	36.5	27.6	12.4	217

Effects of Doubling the Bear Population

While one-half of camp managers thought that doubling the black bear population in the Catskills would increase desirable observations of bear by their campers, only about one-quarter believed doubling the population would result in an increased interest in bear hunting among campers. About 2 out of 5 respondents thought that doubling the bear population would cause increased bear nuisance situations, increased personal safety risks and increased vehicle-bear highway accidents for their campers. While only 7 percent of the respondents believed that more bear would result in more campers, 24 percent believed it would cause a decrease in their clientele. A plurality of respondents (45 percent) was not sure if more bear would cause a perceivable difference in bear-human interaction in the Catskills (Fig. 10). (Refer to Table C-7 for comparison of responses between ranges.)

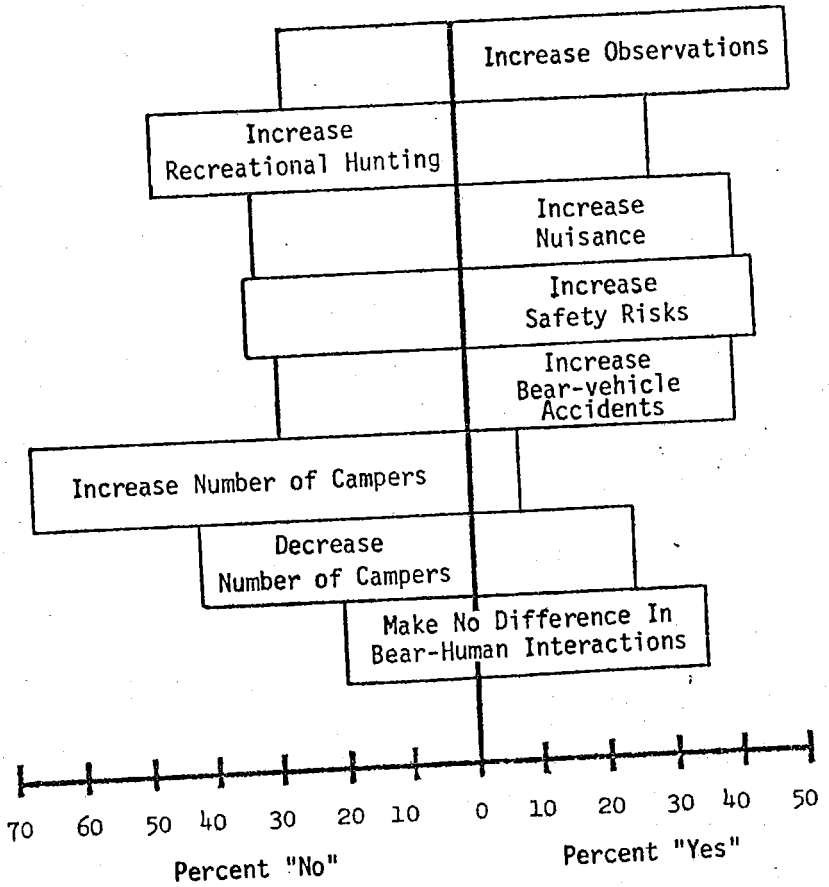

Fig. 10 Camp managers' opinions on the effects of doubling the Catskill black bear population ("don't know" responses omitted).

Trends in Future Bear Population Desired by Camp Managers

Increasing the Catskill black bear population (from their perception of 1976-77 levels) was considered desirable by a plurality of camp managers (43 percent); 28 percent did not want it to increase; and 29 percent weren't sure. While respondents did not differ greatly among the ranges, those from the N. Occupied range were slightly less inclined to want the bear population to increase than were those from the N. Unoccupied and S. Occupied ranges (Fig. 11; Table C-8).

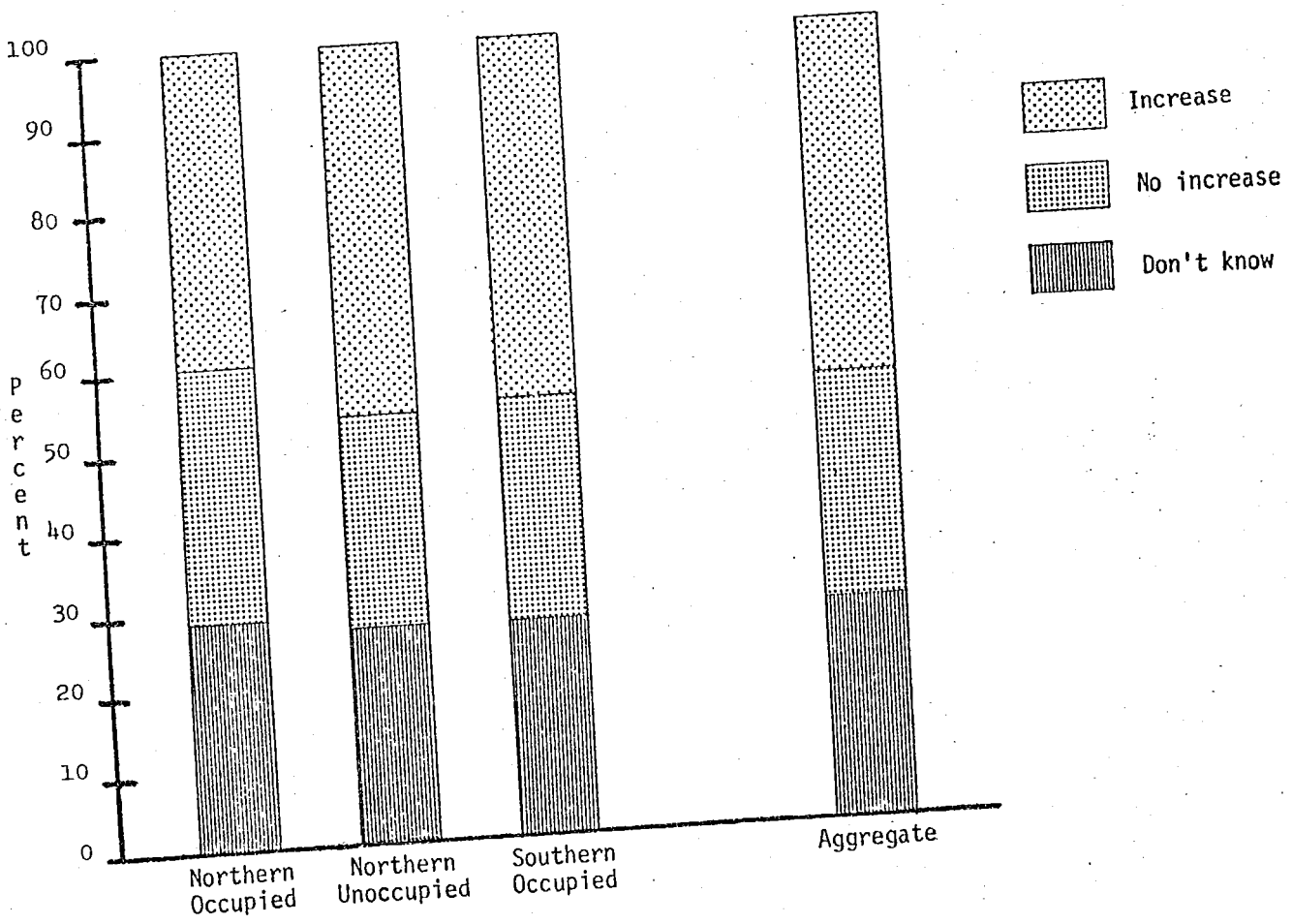

Fig. 11 Future bear population trend desired by camp managers, by range.

Comparison of Camp Managers Who Had vs. Those Who Had Not Seen Bear in the Catskills

Bear Behavior: Camp managers who had seen a bear were more willing to express attitudes about them than were those who had never seen a bear. Greater proportions of those who had seen a bear vs. those who had not believed bears are timid (38 vs. 13 percent) and seldom cause damage (32 vs. 12 percent). This general trend occurred in each bear range (Table 16).

Table 16. CAMP MANAGERS' ATTITUDES TOWARD BEAR, BY PERSONAL SIGHTINGS

Bear Range / Personal Sightings	Attitude: Bears Are Timid	Bears Seldom Damage	Bears Often Damage	Bears Are A Menace	Not Familiar with Bears	Total N
	Percent					
Northern Occupied[a]						
Sighted	45.8	25.0	0.0	0.0	29.2	24
Haven't Sighted	16.2	13.5	8.1	5.4	56.8	37
TOTAL	27.9	18.0	4.9	3.3	45.9	61
Northern Unoccupied[a]						
Sighted	37.5	43.7	6.3	0.0	12.5	16
Haven't Sighted	16.7	10.6	1.5	3.0	68.2	66
TOTAL	20.7	17.1	2.4	2.4	57.4	82
Southern Occupied[a]						
Sighted	31.0	31.0	3.4	0.0	34.6	29
Haven't Sighted	7.7	13.5	0.0	0.0	78.8	52
TOTAL	16.0	19.8	1.2	0.0	63.0	81
Aggregate[b]						
Sighted	37.7	31.9	2.9	0.0	27.5	69
Haven't Sighted	13.1	11.9	2.5	2.5	70.0	160
TOTAL	20.5	17.9	2.6	1.7	57.3	229

a χ^2 test between those who have vs. haven't sighted bear is significant at $p \geq .95$ for this bear range.

b χ^2 test between those who have vs. haven't sighted bear is significant at $p \geq .95$.

Acceptability of Bear Nuisance: A greater willingness to incur some amount of financial loss was indicated by camp managers who had seen a bear than by those who had not (38 and 21 percent, respectively). While this trend occurred in both Occupied ranges, it did not occur in the N. Unoccupied range, where similar proportions of those who had vs. those who had not seen a bear indicated that economic loss would be tolerable and more of those who had vs. those who had not seen a bear indicated that no nuisance activity from bear would be tolerable (Table 17).

Table 17. ANNUAL NUISANCE ACTIVITY ACCEPTABLE TO CAMP MANAGERS, BY PERSONAL SIGHTINGS

Bear Range / Personal Sightings	Annual Nuisance Activity: None	Annoyance, no $ loss	<$100 loss	$100-300 loss	>$300 loss	Total N
	Percent					
Northern Occupied[a]						
Sighted	16.7	45.8	29.2	0.0	8.3	24
Haven't Sighted	56.8	27.0	10.8	2.7	2.7	37
TOTAL	41.1	34.4	18.0	1.6	4.9	61
Northern Unoccupied						
Sighted	43.7	37.5	12.5	0.0	6.3	16
Haven't Sighted	34.4	44.3	16.4	3.3	1.6	61
TOTAL	36.4	42.8	15.6	2.6	2.6	77
Southern Occupied[a]						
Sighted	17.9	32.1	32.1	10.7	7.1	28
Haven't Sighted	47.2	30.2	22.6	0.0	0.0	53
TOTAL	37.0	30.9	25.9	3.7	2.5	81
Aggregate[b]						
Sighted	23.5	38.2	26.5	4.4	7.4	68
Haven't Sighted	44.3	34.6	17.9	1.9	1.3	156
TOTAL	38.0	35.7	20.5	2.7	3.1	224

a χ^2 test between those who have vs. haven't sighted bear is significant at $p \geq .95$ for this bear range.

b χ^2 test between those who have vs. haven't sighted bear is significant at $p \geq .95$.

Maintenance of Black Bear Population: Camp managers who had seen a bear were more likely to want land use regulations to protect bear habitat than were those who had never seen a bear (33 and 19 percent, respectively); however, a plurality of each group (40 and 35 percent, respectively) preferred a balance between bear habitat requirements and human land use needs. In the N. Occupied range, respondents who had seen a bear were more likely to want a balance of bear-human needs while those who had never seen a bear wanted bears to be maintained only if no conflict occurred with human land use needs. In the N. Unoccupied range, a plurality of both those who had and those who had not seen a bear wanted the population maintained through a realistic balance of human land use needs and bear habitat requirements. In the S. Occupied range, the majority of those who had seen a bear wanted to protect bear habitat, while the greatest proportion of those who had never seen a bear wanted to maintain the bear population only if its maintenance resulted in no conflict with human land use needs (Table 18).

Bear Population Trend Desired: A much larger proportion of camp managers who had seen bear vs. those who had not wanted the bear population to increase (65 vs. 34 percent). This trend was consistent in each range (Table 19).

Degree of Camper-Bear Interaction Desired: Camp managers who reported previous sightings of bear in the Catskills tended to want their campers to see bear on nearby undeveloped lands, near their camp, and at their camp, while most respondents who had not seen bear previously either had no interest in having their campers see bear or wanted sightings restricted to nearby undeveloped land or remote areas of the Catskill Mountains (Table 20).

Table 18. IMPORTANCE TO CAMP MANAGERS OF MAINTAINING THE BLACK BEAR POPULATION, BY PERSONAL SIGHTINGS

Bear Range / Personal Sightings	Importance Indicator: Protect All Bear Habitat	Realistic Balance of Bear-Human Needs	Only If No Conflict with Human Needs	Human Needs Are More Important Than Bears' Needs	Total N
	Percent				
Northern Occupied					
Sighted	16.0	48.0	24.0	12.0	25
Haven't Sighted	14.7	32.4	41.1	11.8	34
TOTAL	15.3	38.9	33.9	11.9	59
Northern Unoccupied					
Sighted	18.8	49.9	25.0	6.3	16
Haven't Sighted	23.3	43.4	20.0	13.3	60
TOTAL	22.4	44.7	21.1	11.8	76
Southern Occupied[a]					
Sighted	57.7	26.9	15.4	0.0	26
Haven't Sighted	17.6	25.5	37.3	19.6	51
TOTAL	31.1	26.0	29.9	13.0	77
Aggregate[b]					
Sighted	32.8	40.3	20.9	6.0	67
Haven't Sighted	18.8	34.9	30.9	15.4	149
TOTAL	23.1	36.6	27.8	12.5	216

[a] χ^2 test between those who have vs. haven't sighted bear is significant at $p \geq .95$ for this bear range.

[b] χ^2 test between those who have vs. haven't sighted bear is significant at $p \geq .95$.

Table 19. FUTURE BEAR POPULATION TREND DESIRED BY CAMP MANAGERS, BY PERSONAL SIGHTINGS

Bear Range / Personal Sightings	Bear Population Trend Desired			Total N
	Increase	No Increase	Don't Know	
	Percent			
Northern Occupied[a]				
Sighted	61.6	11.5	26.9	26
Haven't Sighted	24.3	46.0	29.7	37
TOTAL	39.7	31.7	28.6	63
Northern Unoccupied				
Sighted	60.0	13.3	26.7	15
Haven't Sighted	43.7	29.7	26.6	64
TOTAL	46.8	26.6	26.6	79
Southern Occupied[a]				
Sighted	71.4	14.3	14.3	28
Haven't Sighted	30.2	35.8	34.0	53
TOTAL	44.4	28.4	27.2	81
Aggregate[b]				
Sighted	65.3	13.0	21.7	69
Haven't Sighted	34.2	34.8	31.0	158
TOTAL	43.6	28.2	28.2	227

[a] χ^2 test between those who have vs. haven't sighted bear is significant at $p \geq .95$ for this bear range.

[b] χ^2 test between those who have vs. haven't sighted bear is significant at $p \geq .95$.

Table 20. AREAS WHERE CAMP MANAGERS BELIEVE CAMPERS SHOULD SEE BEAR, BY PERSONAL SIGHTINGS

Bear Range / Personal Sightings	Areas: At Camp	Near Camp	On Undeveloped Lands	In Remote Areas	Never	Total N
	Percent					
Northern Occupied[a]						
Sighted	16.7	29.2	33.2	4.2	16.7	24
Haven't Sighted	7.9	5.3	23.7	23.7	39.4	38
TOTAL	11.3	14.5	27.4	16.1	30.7	62
Northern Unoccupied						
Sighted	12.5	18.8	49.9	6.3	12.5	16
Haven't Sighted	15.4	10.8	23.1	23.1	27.6	65
TOTAL	14.8	12.3	28.4	19.8	24.7	81
Southern Occupied[a]						
Sighted	32.1	17.9	14.3	14.3	21.4	28
Haven't Sighted	1.9	13.2	28.3	24.5	32.1	53
TOTAL	12.3	14.8	23.5	21.0	28.4	81
Aggregate[b]						
Sighted	22.1	22.1	29.4	8.8	17.6	68
Haven't Sighted	8.7	10.6	25.5	23.0	32.2	161
TOTAL	12.7	14.0	26.6	18.8	27.9	229

a χ^2 test between those who have vs. haven't sighted bear is significant at $p \geq .95$ for this bear range.

b χ^2 test between those who have vs. haven't sighted bear is significant at $p \geq .95$.

Effects of Doubling the Bear Population: Greater proportions of camp managers who had seen a bear vs. those who had not seen a bear believed that doubling the bear population: (1) would increase the number of desirable sightings of bear by their campers (68 vs. 42 percent), (2) would increase their campers' interest in bear hunting (49 vs. 18 percent), (3) would not increase bear nuisance situations with campers (51 vs. 24 percent), (4) would not increase personal safety risks among campers (50 vs. 26 percent), (5) would not increase vehicle-bear highway accidents (44 vs. 23 percent), and (6) would not cause a decrease in their clientele (52 vs. 38 percent). Similar proportions of those who had and those who had not seen bear (39 and 33 percent, respectively) believed that doubling the population would make little to no perceivable in bear-human interaction (Table 21). The only marked deviation from these general trends was in the N. Unoccupied range where more respondents who had seen a bear believed doubling the bear population would increase safety risks to campers.

Attitudes of Camp Managers Who Have Experienced Bear Nuisance Problems

Since only 5 respondents reported experiencing bear nuisance problems at their camps, statistical comparisons between them and respondents who have not had these experiences will not be attempted. However, it is worth noting that even these people generally had positive attitudes toward black bear. Four of the 5 respondents indicated a willingness to tolerate annoyance from black bears, and the other person would be willing to incur damage of less than $100. Additionally, 4 out of the 5 believed that maintenance of the black bear population is important enough to warrant land use regulations throughout the Catskills to protect bear habitat. Only one of these respondents thought that doubling the bear population would result in increased bear nuisance problems. And, 4 out of 5 of these respondents wanted the bear population to increase; the other respondent wasn't sure.

Table 21. CAMP MANAGERS' OPINIONS ON THE EFFECT OF DOUBLING THE CATSKILL BLACK BEAR POPULATION, BY PERSONAL SIGHTINGS

Would doubling the population...

	Yes	No	Don't Know	Total N
	Percent			
Increase observation?[a]				
Sighted	68.2	18.8	13.0	69
Haven't Sighted	41.8	29.4	28.8	153
TOTAL	50.0	26.1	23.9	222
Increase bear hunting?[a]				
Sighted	49.2	30.8	20.0	65
Haven't Sighted	18.4	54.0	27.6	152
TOTAL	27.6	47.0	25.3	217
Increase nuisance?[a]				
Sighted	26.2	50.7	23.1	65
Haven't Sighted	46.8	24.0	29.2	154
TOTAL	40.6	32.0	27.4	219
Increase safety risks?[a]				
Sighted	25.0	50.0	25.0	64
Haven't Sighted	50.3	25.5	24.2	153
TOTAL	42.9	32.7	24.4	217
Increase bear-vehicle accidents?[a]				
Sighted	29.7	43.7	26.6	64
Haven't Sighted	44.1	23.0	32.9	152
TOTAL	39.8	29.2	31.0	216
Increase campers?				
Sighted	11.1	63.5	25.4	63
Haven't Sighted	5.9	67.8	26.3	152
TOTAL	7.4	66.6	26.0	215

Table 21 (cont'd). CAMP MANAGERS' OPINIONS ON THE EFFECT OF DOUBLING THE CATSKILL BLACK BEAR POPULATION, BY PERSONAL SIGHTINGS

Would doubling the population...

	Yes	No	Don't Know	Total N
	Percent			
Decrease campers?				
Sighted	17.5	52.3	30.2	63
Haven't Sighted	27.5	37.9	34.6	153
TOTAL	24.5	42.2	33.3	216
Have little or no perceivable difference in bear-human interaction?				
Sighted	39.3	21.3	39.3	61
Haven't Sighted	32.9	19.2	47.9	145
TOTAL	34.8	19.8	45.4	207

[a] X^2 test between those who have vs. haven't sighted bear is significant at $p \geq .95$.

Attitudes of Hunters vs. Nonhunters

Overall, about one-third of camp managers were hunters, with respondents from the N. Occupied range having the greatest proportion of hunters (39 percent) (Table 22). Greater proportions of hunters than nonhunters in all bear ranges reported sighting a bear in the Catskills sometime prior to the study (Table 23).

Acceptability of Bear Nuisance: Bear nuisance activity resulting in economic loss was acceptable to a greater proportion of hunting than nonhunting respondents (37 and 21 percent, respectively). While this same general trend was evident among the respondents from the N. Occupied range, those from the other ranges differed. In the N. Unoccupied range, low proportions of both hunters and nonhunters (20 and 17 percent, respectively) indicated they would tolerate economic loss. In the S. Occupied range, 52 percent of hunters vs. 25 percent of nonhunters indicated that they would tolerate economic loss (Table 24).

Limiting Factors: With the exception of one group, a plurality of both hunting and nonhunting camp managers in each of the four bear ranges believed the availability of food was the most important factor limiting the bear population. Hunters in the S. Occupied range gave equal emphasis to amount of forested land as a limiting factor. Few hunters or nonhunters in the ranges listed hunting as a limiting factor; but overall a somewhat greater proportion of nonhunters than hunters (19 and 8 percent, respectively) believed that hunting was an important factor limiting bear populations in the Catskills (Table 25). More hunters than nonhunters (54 and 18 percent, respectively) believed hunting was necessary to control black bear populations. Differences of this general magnitude were found in all ranges.

Bear Population Trend Desired: A much greater proportion of hunting than nonhunting respondents (70 and 30 percent, respectively) wanted the bear population to increase. This trend, too, occurred in all ranges, but was extremely marked in the S. Occupied range, where 91 percent of hunters vs. 26 percent of nonhunters wanted the bear population to increase (Table 26).

Table 22. PROPORTION OF CAMP MANAGERS WHO HUNT, BY BEAR RANGE

Bear Range	Percent Who Hunt	Percent Who Don't Hunt	Total N
Northern Occupied	39.1	60.9	64
Northern Unoccupied	34.2	65.8	76
Southern Occupied	28.8	71.2	80
Southern Unoccupied	(0)	(5)	5
TOTAL	32.9	67.1	225

Table 23. PERSONAL BEAR SIGHTINGS OF CAMP MANAGERS, BY HUNTING STATUS

Bear Range / Hunting Status	Percent With Personal Bear Sightings	Percent Without Personal Bear Sightings	Total N
Northern Occupied			
Hunter	52.0	48.0	25
Nonhunter	33.3	66.7	39
Northern Occupied[a]			
Hunter	42.3	57.7	26
Nonhunter	8.0	92.0	50
Southern Occupied[a]			
Hunter	65.2	34.8	23
Nonhunter	23.2	76.8	59
Aggregate[b]			
Hunter	52.7	47.3	74
Nonhunter	20.0	80.0	150

[a] χ^2 test between hunters vs. nonhunters is significant at $p \geq .95$ for this bear range.

[b] χ^2 test between hunters vs. nonhunters is significant at $p \geq .95$.

Table 24. LEVELS OF ANNUAL NUISANCE ACTIVITY ACCEPTABLE TO CAMP MANAGERS, BY HUNTING STATUS

Bear Range / Hunting Status	Acceptable Annual Nuisance Activity: None	Annoyance, no $ loss	<$100 loss	$100-300 loss	>$300 loss	Total N
	Percent					
Northern Occupied						
Hunter	26.1	34.9	30.4	4.3	4.3	23
Nonhunter	50.0	34.2	10.5	0.0	5.3	38
TOTAL	41.1	34.4	18.0	1.6	4.9	61
Northern Unoccupied						
Hunter	40.0	40.0	12.0	4.0	4.0	25
Nonhunter	39.1	43.5	13.0	2.2	2.2	46
TOTAL	39.4	42.3	12.7	2.8	2.8	71
Southern Occupied[a]						
Hunter	13.0	34.8	34.8	8.7	8.7	23
Nonhunter	44.6	30.4	23.2	1.8	0.0	56
TOTAL	35.5	31.6	26.6	3.8	2.5	79
Aggregate[b]						
Hunter	26.8	36.6	25.4	5.6	5.6	71
Nonhunter	44.1	35.2	17.2	1.4	2.1	145
TOTAL	38.5	35.6	19.9	2.8	3.2	216

[a] χ^2 test between hunters vs. nonhunters is significant at $p \geq .95$ for this bear range.

[b] χ^2 test between hunters vs. nonhunters is significant at $p \geq .95$.

Table 25. FACTORS CAMP MANAGERS BELIEVED WERE LIMITING THE BEAR POPULATION, BY HUNTING STATUS

Bear Range / Hunting Status	Limiting Factor: Amount of Forested Land (Percent)	Availability of Food (Percent)	Human Contact (Percent)	Hunting (Percent)	Other[a] (Percent)	Total N
Northern Occupied						
Hunter	14.3	47.6	4.8	9.5	23.8	21
Nonhunter	9.1	39.4	9.1	21.2	21.2	33
TOTAL	11.1	42.6	7.4	16.7	22.2	54
Northern Unoccupied						
Hunter	17.4	47.8	8.7	0.0	26.1	23
Nonhunter	16.7	28.6	9.5	19.0	26.2	42
TOTAL	16.9	35.4	9.2	12.3	26.2	65
Southern Occupied						
Hunter	26.1	26.1	8.7	13.0	26.1	23
Nonhunter	5.0	40.0	10.0	15.0	30.0	40
TOTAL	12.7	34.9	9.5	14.3	28.6	63
Aggregate						
Hunter	19.4	40.2	7.5	7.5	25.4	67
Nonhunter	10.1	36.1	9.2	19.3	25.2	119
TOTAL	13.4	37.6	8.6	15.1	25.3	186

[a]Includes "don't know" and multiple responses.

Table 26. FUTURE BEAR TREND DESIRED BY CAMP MANAGERS, BY HUNTING STATUS

Bear Range / Hunting Status	Bear Population Trend Desired			Total N
	Increase	No Increase	Don't Know	
	Percent			
Northern Occupied[a]				
Hunter	60.0	24.0	16.0	25
Nonhunter	26.3	36.8	36.8	38
TOTAL	39.7	31.7	28.6	63
Northern Unoccupied				
Hunter	61.5	15.4	23.1	26
Nonhunter	36.0	34.0	30.0	50
TOTAL	44.8	27.6	27.6	76
Southern Occupied[a]				
Hunter	91.3	8.7	0.0	23
Nonhunter	26.3	36.8	36.8	57
TOTAL	45.0	28.8	26.3	80
Aggregate[b]				
Hunter	70.3	16.2	13.5	74
Nonhunter	29.5	34.9	35.6	149
TOTAL	43.0	28.7	28.3	223

[a] χ^2 test between hunters vs. nonhunters is significant at $p \geq .95$ for this bear range.

[b] χ^2 test between hunters vs. nonhunters is significant at $p \geq .95$.

Comparison of Camp Managers Whose Campers Did vs. Those Whose Campers Did Not See Bear in 1977 [4]

Camp managers who recently have had their campers report bear sightings should have well defined attitudes about the potential impact of black bears on their clientele. Consequently, the responses of these camp managers should be considered carefully when evaluating the effects of an increased bear population.

A greater proportion of camps where campers had seen bear in 1977 vs. those where campers had not were located in forested, rural areas (72 vs. 56 percent) (Table C-9) and had environmental education activities (44 vs. 17 percent) (Table C-10).

Degree of Bear-Camper Interaction Desired: Respondents whose campers had seen bear were more inclined than others to want bear occasionally on camp property (26 vs. 12 percent) or near camp property (39 vs. 12 percent), and were less inclined to want their campers' sightings restricted to remote areas of the Catskill Mountains (4 vs. 22 percent) or to want their campers never to see a bear (0 vs. 29 percent); similar proportions of both groups (30 vs. 26 percent) wanted sightings on nearby undeveloped lands (Table 27).

Table 27. AREAS WHERE CAMP MANAGERS BELIEVED CAMPERS SHOULD BE ABLE TO SEE BEAR, BY INCIDENCE OF CAMPERS' SIGHTING BEAR IN 1977

1977 Campers' Sightings[a]	Areas					Total N
	On Camp Property	Near Camp Property	On Undeveloped Lands	In Rural Areas	Never	
	Percent					
Campers Reported Sightings	26.1	39.2	30.4	4.3	0.0	23
Campers Did Not Report Sightings	11.5	12.1	25.9	21.8	28.7	174
TOTAL	13.2	15.2	26.4	19.8	25.4	197

[a] X^2 test between those whose campers reported sightings vs. those whose campers did not report sightings is significant at $p \geq .95$.

[4] Regional comparisons are not included because too few respondents (25 in total) had campers report bear sightings in 1977.

Nuisance Activity From Black Bear: Campers' sightings of bear also seemed to be associated with camp managers' tolerance of bear nuisance activity. By 88 vs. 60 percent, more managers whose campers saw bear indicated tolerance of some annoyance or economic loss due to bear (Table 28).

Table 28. LEVEL OF ANNUAL NUISANCE ACTIVITY ACCEPTABLE TO CAMP MANAGERS, BY INCIDENCE OF CAMPERS' SIGHTING BEAR IN 1977

1977 Campers' Sighting[a]	Annual Nuisance Activity					Total N
	None	Annoyance, no $ loss	<$100 loss	$100-300 loss	>$300 loss	
	Percent					
Campers Reported Sightings	12.0	44.0	36.0	0.0	8.0	25
Campers Did Not Report Sightings	39.6	35.5	18.3	3.6	3.0	169
TOTAL	36.1	36.6	20.6	3.1	3.6	194

[a] X^2 test between those whose campers reported sightings vs. those whose campers did not report sightings is significant at $p \geq .95$.

Effects of Doubling the Bear Population: Greater proportions of managers whose campers saw bear vs. those whose campers did not believed that doubling the bear population: (1) would cause increased desirable observation of bear by their campers (76 vs. 47 percent), (2) would cause increased interest in bear hunting among their campers (48 vs. 26 percent), (3) would not cause an increase in bear nuisance situations with campers (48 vs. 29 percent), (4) would not cause increased safety risks among campers (48 vs. 29 percent), (5) would not cause an increase in bear-vehicle accidents (58 vs. 25 percent), and (6) would not cause a decrease in their clientele (54 vs. 41 percent). More respondents whose campers saw bear vs. those whose campers did not (50 vs. 32 percent) believed that doubling the bear population would make little or no

perceivable difference on bear-human interaction (Table C-11).

Bear Population Trend Desired: The most striking difference between these two groups is in the proportion who wanted the bear population to increase. Eighty percent of camp managers whose campers saw bear vs. 39 percent of those whose campers did not wanted the bear population to increase (Table 29).

Table 29. FUTURE BEAR TREND DESIRED BY CAMP MANAGERS BY INCIDENCE OF CAMPERS' SIGHTING OF BEAR IN 1977

1977 Campers' Sighting[a]	Bear Population Trend Desired			Total N
	Increase	No Increase	Don't Know	
	Percent			
Campers Reported Sightings	80.0	8.0	12.0	25
Campers Did Not Report Sightings	39.4	29.4	31.2	170
TOTAL	44.6	26.7	28.7	195

[a] χ^2 test between those whose campers reported sightings vs. those whose campers did not report sightings is significant at $p \geq .95$.

CORPORATE LANDOWNER SURVEY

Characteristics of Respondents and the Corporations[5] They Represent

The majority of individuals (55 percent) who responded to the corporate questionnaire were owners of the corporation chosen for the sample. Most other respondents were either in positions they described as "executive officer" (19 percent) or "general manager" (12 percent) (Table 30). The corporations surveyed have owned land in the Catskills for an average of about 25 years and employ a mean of 41 people. The majority of corporations owning land in the occupied ranges described the area as forested. In the unoccupied ranges, most corporate land was in either agricultural or forested areas. For the majority of corporations (71 percent) which reported bear sightings on their land, that land was situated in an area described as predominately forested.

Three-quarters of the respondents were aware that black bear inhabit the Catskill Region. Greater proportions of those whose corporations owned land in the occupied ranges reported they were aware that black bears live in the Catskills (Table 31).

Black Bear Hunting

A majority of respondents from the N. Unoccupied, S. Occupied and S. Unoccupied ranges did not allow hunting of black bears on their property; similar proportions from the N. Occupied range did and did not allow hunting (47 and 44 percent, respectively) (Table 32). A plurality of respondents from all but the S. Unoccupied range believed that black bear hunting is necessary as a control to insure that bear numbers are compatible with human land uses and available bear habitat. In the S. Unoccupied range, a plurality of respondents indicated they didn't know if hunting was necessary. Among the ranges, only 16 to 25 percent of the respondents believed hunting was not necessary (Table 33).

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[5]Corporation will be used as a general term for all businesses, organizations or other corporations included in the sample (see Procedures, page 6).

Table 30. RESPONDENTS' POSITION IN CORPORATION, BY BEAR RANGE

Bear Range	Position					Total N
	Owner	General Manager	Executive Officer	Public Relations Officer	Other	
Northern Occupied	54.9	12.2	15.9	1.2	15.8	82
Northern Unoccupied	55.2	11.8	16.5	1.2	15.3	85
Southern Occupied	56.6	13.2	19.7	1.3	9.2	76
Southern Unoccupied	51.0	6.4	25.5	4.3	12.8	47
TOTAL	54.5	11.6	18.8	1.7	13.4	292

Table 31. CORPORATION REPRESENTATIVES' AWARENESS OF BLACK BEAR IN THE CATSKILLS, BY BEAR RANGE

Bear Range[a]	Percent Not Aware of Bear	Percent Aware of Bear	Percent with No Opinion	Total N
Northern Occupied	10.2	84.1	5.7	88
Northern Unoccupied	28.7	66.7	4.6	87
Southern Occupied	9.0	83.3	7.7	78
Southern Unoccupied	20.4	67.4	12.2	49
TOTAL	16.8	76.3	6.9	304

[a] χ^2 test between bear ranges is significant at $p \geq .95$.

Table 32. PROPORTIONS OF CORPORATIONS ALLOWING BEAR HUNTING, BY BEAR RANGE

Bear Range	Percent Which Did Not Allow Hunting	Percent Which Allowed Hunting	Percent Which Didn't Know If Hunting Was Allowed	Total N
Northern Occupied	43.7	47.1	9.2	87
Northern Unoccupied	56.0	33.3	10.7	84
Southern Occupied	53.2	40.3	6.5	77
Southern Unoccupied	56.9	29.5	13.6	44
TOTAL	51.7	38.8	9.5	294

Table 33. CORPORATION REPRESENTATIVES' OPINION ON NECESSITY OF HUNTING TO CONTROL BEAR POPULATIONS, BY BEAR RANGE

Bear Range	Percent Who Did Not Consider Hunting Necessary	Percent Who Considered Hunting Necessary	Percent Who Didn't Know If Hunting Was Necessary	Total N
Northern Occupied	15.7	48.2	36.1	83
Northern Unoccupied	16.7	42.8	40.5	84
Southern Occupied	24.7	42.8	32.5	77
Southern Unoccupied	21.7	34.8	43.5	46
TOTAL	19.2	43.1	37.7	292

Contact With Black Bears

Black bear sightings on their corporation's property were reported about twice as frequently by respondents in the occupied ranges (34 and 30 percent) vs. the unoccupied ranges (16 and 14 percent). The incidences of bear sightings in 1976 and 1977 were similar within each bear range (Table 34).

Only one damage problem occurred, even though bear had been reported on the property of about one-quarter of the corporations. This was a case where $60 of damage was sustained due to black bear depredation to livestock in the S. Unoccupied range prior to 1976. The damage was reported to DEC, but the corporation representative was not satisfied with DEC's response. (See page 50 for profile of this respondent's attitudes toward bear.)

Table 34. REPORTED BLACK BEAR SIGHTINGS ON CORPORATION PROPERTY, BY BEAR RANGE

Bear Range	Percent With No Sightings Reported	Percent Who Weren't Sure If Bear Sightings Had Ever Been Reported	Percent With Sightings Reported	Total N
Northern Occupied	47.7	18.2	34.1	88
Northern Unoccupied	60.9	23.0	16.1	87
Southern Occupied	51.3	19.2	29.5	78
Southern Unoccupied	59.2	26.5	14.3	49
TOTAL	54.4	21.1	24.5	302

	Percent With Sightings in 1977[a]	Percent With Sightings in 1976	Percent With Sightings Prior to 1976	Total N
Northern Occupied	17.0	12.5	22.7	88
Northern Unoccupied	5.7	6.9	11.5	87
Southern Occupied	16.7	15.4	24.4	78
Southern Unoccupied	2.0	4.1	12.2	49
TOTAL	11.2	10.2	18.4	304

[a] χ^2 test significant at $p \geq .95$ between those who did vs. did not have sightings in

Attitudes About Black Bears

Assessments of black bear population trends were not offered by the vast majority of respondents; four-fifths indicated they did not know the trend from 1960-1970 and three-fourths indicated they did not know the trend from 1970-1978. Generally, those who did give an opinion thought the bear population either remained the same or decreased (Table 35).

Table 35. CORPORATION REPRESENTATIVES' OPINION REGARDING THE BEAR POPULATION TREND FROM 1960-1970 and 1970-1978, BY BEAR RANGE

Bear Range	Assessments of 1960-1970 Bear Population Trend				Total N
	Increased	Remained the Same	Decreased	Don't Know	
	Percent				
Northern Occupied	3.5	8.2	10.6	77.7	85
Northern Unoccupied	2.5	8.8	2.5	86.2	80
Southern Occupied	6.9	9.7	6.9	76.5	72
Southern Unoccupied	2.3	2.3	9.1	86.3	44
TOTAL	3.9	7.8	7.1	81.2	283

Bear Range	Assessments of the 1970-1978 Bear Population Trend[a]				Total N
	Increased	Remained the Same	Decreased	Don't Know	
	Percent				
Northern Occupied	2.3	9.2	14.9	73.6	87
Northern Unoccupied	1.2	9.4	2.4	87.0	85
Southern Occupied	6.6	18.4	10.5	64.5	76
Southern Unoccupied	4.3	2.2	15.2	78.3	46
TOTAL	3.4	10.5	10.5	75.6	296

[a] χ^2 test between bear ranges is significant at $p \geq .95$.

Factors limiting the bear population were not known by about one-quarter of the respondents. For those who did offer an opinion, the availability of food was given most often, while hunting and the amount of forested land were secondary.

Opinions about bear behavior were not received from a plurality of respondents from each range because they did not consider themselves adequately familiar with black bears. Of those expressing an opinion, most believed bears are timid and stay away from their property or that bears occasionally approach their property but seldom cause damage (Table 36).

Table 36. ATTITUDES OF CORPORATION REPRESENTATIVES TOWARD THE BEHAVIOR OF BLACK BEAR, BY BEAR RANGE

Bear Range	Attitude					Total N
	Timid	Seldom Damage	Often Damage	Menace	Not Familiar With Bears	
	Percent					
Northern Occupied	27.9	22.1	1.2	0.0	48.8	86
Northern Unoccupied	18.3	13.4	0.0	1.2	67.1	82
Southern Occupied	23.7	23.7	1.3	1.3	50.0	76
Southern Unoccupied	12.8	19.1	0.0	2.1	66.0	47
TOTAL	21.8	19.5	0.7	1.0	57.0	293

Corporate opinion was split as to the degree to which black bears should inhabit the Catskill Region. The greatest proportion of respondents from each range indicated that they would not mind occasionally having bear on the corporation's property, but a notable minority from each range would only like to have bears in remote areas of the Catskill Mountains (Table 37).

Table 37. CORPORATION REPRESENTATIVES' OPINION REGARDING THE DEGREE TO WHICH THEY WOULD LIKE TO HAVE BLACK BEARS IN THE CATSKILL REGION, BY BEAR RANGE

Bear Range	Areas Where Bears Are Desired				Total N
	On Corp. Property	Near Corp. Property	On Undeveloped Lands	In Remote Areas	
	Percent				
Northern Occupied	54.9	2.4	9.8	32.9	82
Northern Unoccupied	45.7	2.5	7.4	44.4	81
Southern Occupied	46.7	4.0	16.0	33.3	75
Southern Unoccupied	40.5	14.3	7.1	38.1	42
TOTAL	47.9	4.6	10.6	36.9	282

No nuisance activity would be acceptable to two out of five corporations. Slightly over one-third of the respondents from each range reported that their corporation would tolerate annoyance, but no economic loss. Most of the remaining respondents indicated that economic loss would be acceptable, although few considered amounts in excess of $300 acceptable. This trend in responses prevailed in each range (Figure 12; Table D-1).

Maintaining a population of black bears in the Catskills was considered important by most corporations. The greatest proportion from each range believed a balance of human land use needs and bear habitat requirements should be achieved. The next greatest proportion from each range thought something should be done to maintain a bear population, but only to the extent that considerations for bear do not conflict with human land use needs. Between 16 and 20 percent of respondents from the ranges believed land use regulations to protect bear habitat are warranted. Among the ranges, only 11 to 16 percent indicated that human land use needs for bear habitat are more important than bears (Table 38).

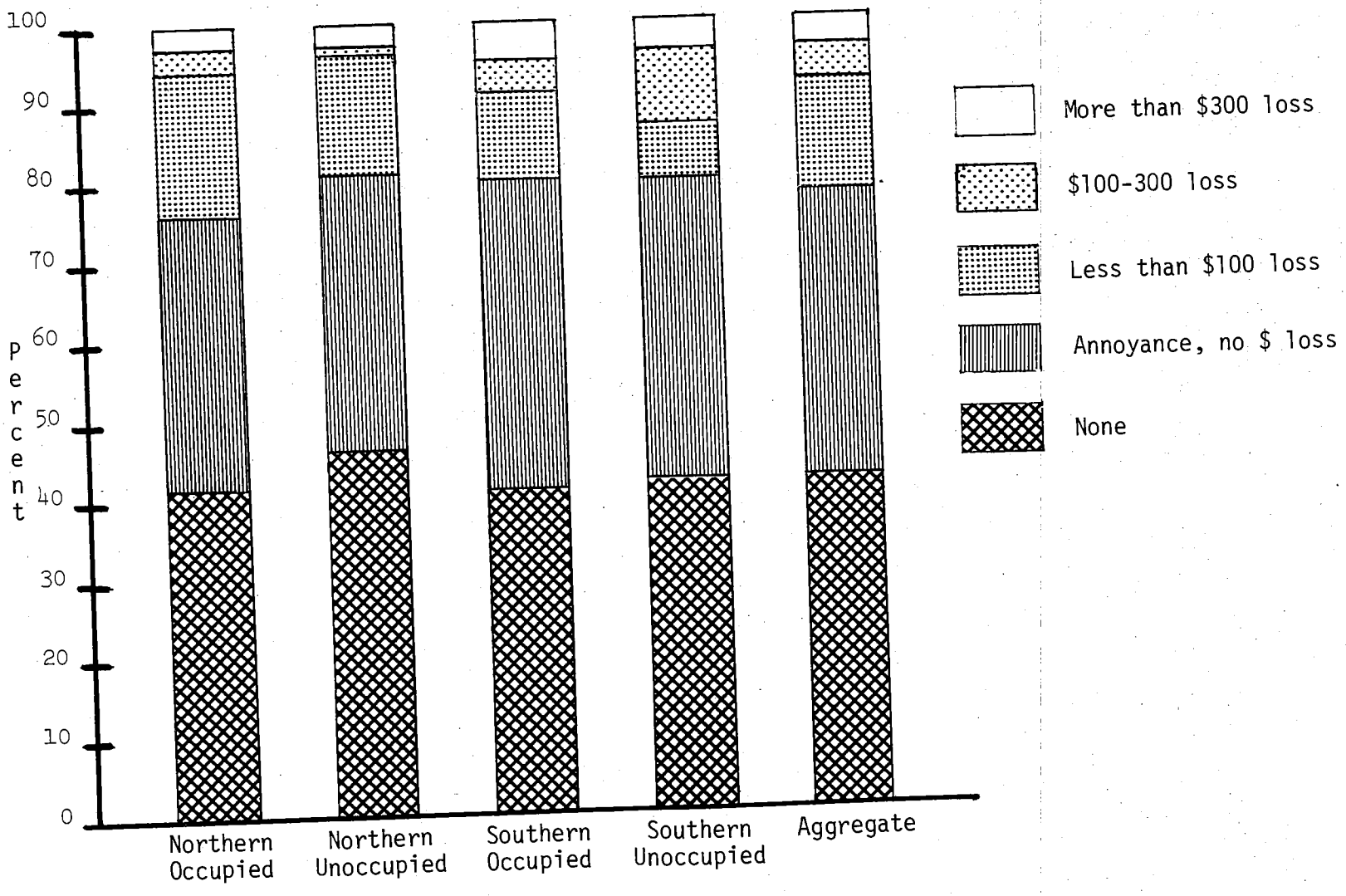

Fig. 12 Level of annual nuisance activity acceptable to corporate representatives, by range.

Table 38. IMPORTANCE TO CORPORATE LANDOWNERS OF MAINTAINING THE CATSKILL BLACK BEAR POPULATION, BY BEAR RANGE

Bear Range	Importance Indicator: Protect Habitat Through Land Use Regulations	Balance of Human and Bear Needs	Only to Extent That Doesn't Conflict With Human Land Use Needs	Human Land Use Needs Are More Important Than Bears	Total N
	Percent				
Northern Occupied	15.7	45.8	27.7	10.8	83
Northern Unoccupied	16.5	34.2	34.2	15.1	79
Southern Occupied	21.3	36.0	26.7	16.0	75
Southern Unoccupied	25.6	27.9	30.2	16.3	43
TOTAL	18.8	37.2	29.8	14.2	282

The sole respondent with monetary loss due to bears ($60 of livestock damage prior to 1976) expressed an overall positive opinion of bears in the Catskill Region. Despite the damage experienced, it was this person's opinion that black bears seldom damage property. This respondent is also more willing to accept annoyance, given no monetary loss is experienced, and to protect bear habitat than are respondents in general.

Effects of Doubling the Bear Population

Corporation representatives generally believed that doubling the black bear population would cause an increase in desirable observation of bears and an increase in recreational hunting of bears. Opinion was divided on whether or not more bears would result in: (1) increased nuisance situations on their corporation's property, (2) increased personal safety risks for people in the

Catskills, and (3) increased vehicle-bear highway accidents. A majority of respondents thought that more bear would have little effect on their business or property value. Most respondents who had an opinion believed doubling the bear population would have little or no perceivable difference in bear-human interaction (Figure 13; Table D-2).

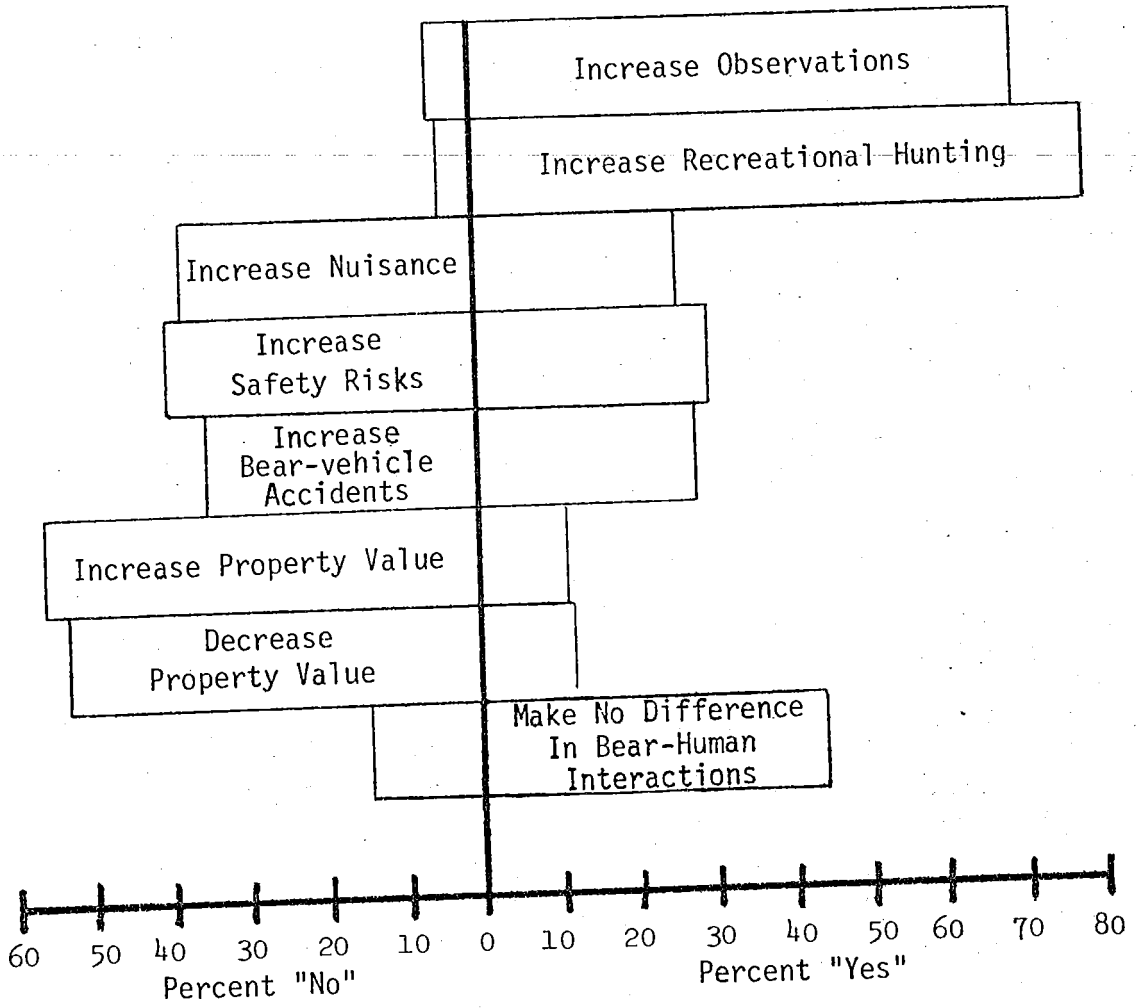

Fig. 13 Corporate representatives' opinions on the effects of doubling the Catskill black bear population ("don't know" responses omitted).

Trends in Future Bear Population Desired by Corporation Representatives

A plurality of respondents from the N. Occupied, N. Unoccupied and S. Occupied ranges indicated that they wanted the black bear population to increase, but a plurality of those from the S. Unoccupied range had no opinion. Among the ranges, about 16 to 26 percent of respondents indicated that they did not want the bear population to increase (Figure 14; Table D-3).

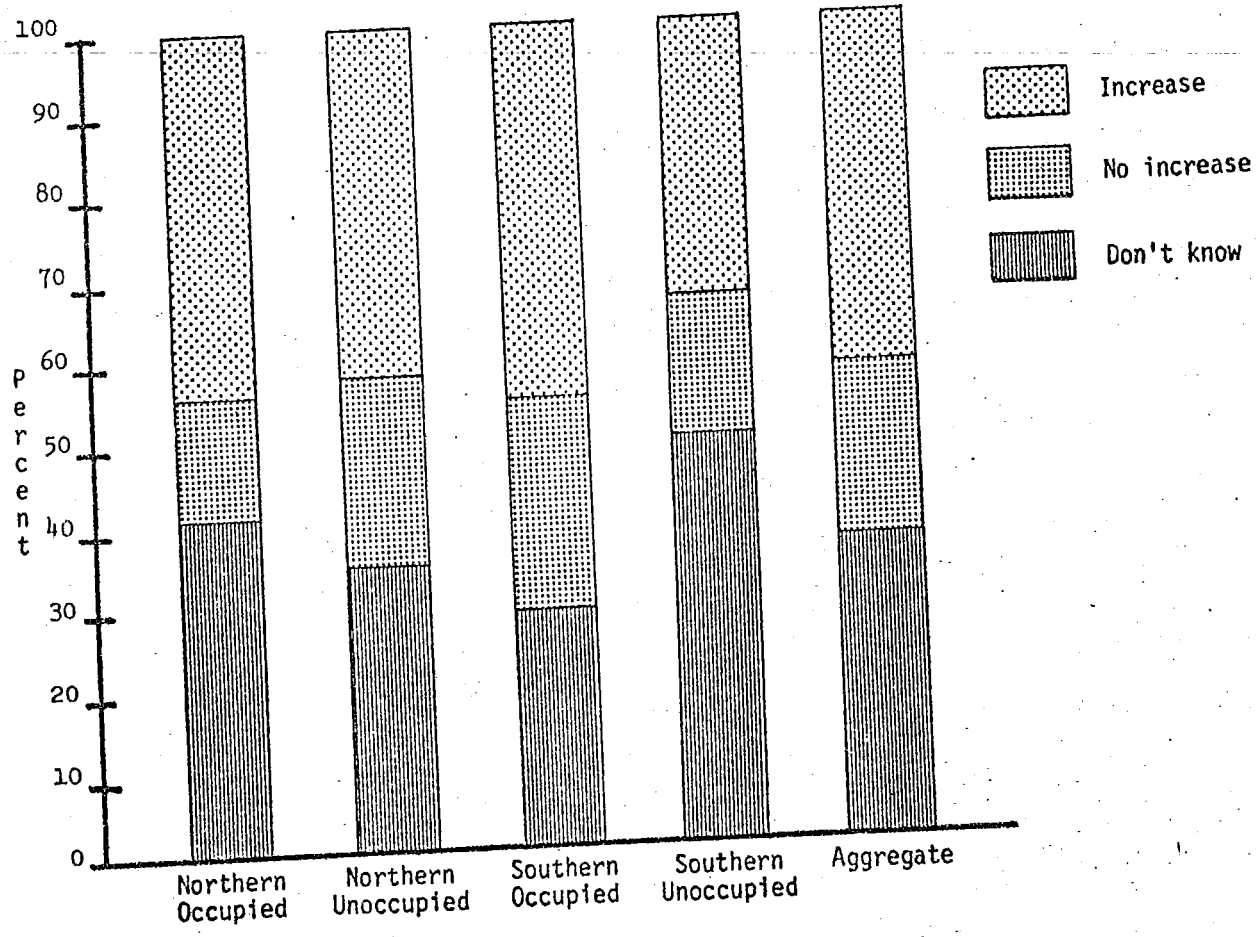

Fig. 14 Future bear population trend desired by corporate representatives, by range.

Comparison of Corporation Representatives Who Were vs. Were Not Aware That Black Bears Inhabit the Catskill Region

Since few respondents reported that they were unaware that black bears live in the Catskills, comparison of their attitudes to those of respondents who were aware are not reported on a range-by-range basis. Aggregate comparisons are reported to give some indication of differences between the two groups. Since quotas of samples were drawn separately for each bear range, and since the number of corporations in each bear range was not known, the reader should keep in mind that some geographic bias will likely be present if these aggregates are compared to all corporations in the study area.

Respondents who were aware of the presence of black bears were more willing to express an opinion regarding the behavior of bears. The responses of the majority of these people fell into the two most positive response categories, indicating they believed bear are timid and seldom cause damage (Table 39). Respondents who were not aware of bear more frequently represented corporations with low tolerance of nuisance activity than did those who were aware of bear, with 64 percent of the former group vs. 34 percent of the latter indicating that no nuisance activity would be acceptable to their corporation (Table 40).

Compared to respondents who were not aware of bears, those who were more frequently represented corporations which regarded the maintenance of the bear population as important and which desired an increase in the bear population (Tables 41 and 42).

Significantly greater proportions of respondents who were aware of bears believed that doubling the bear population: (1) would result in increased desirable observations of bears, (2) would cause increased interest in hunting black bears, (3) would not cause an increased occurrence of bear nuisance situations on their corporation's property, (4) would not cause increased safety risks for people in the Catskills, (5) would not cause an increased incidence of vehicle-bear highway accidents, (6) would not cause either an increase or decrease in their business or property value, and (7) would not cause a perceivable difference in bear-human interaction (Table D-4).

Table 39. ATTITUDE OF CORPORATION REPRESENTATIVES TOWARD BEAR, BY AWARENESS OF BEARS

Awareness of Bears[a]	Attitude					Total N
	Timid	Seldom Damage	Often Damage	Menace	Not Familiar with Bears	
	Percent					
Not aware of bears	4.1	2.0	0.0	2.0	91.9	49
Aware of bears	27.4	25.1	0.9	0.9	45.7	223
Don't know	4.8	0.0	0.0	0.0	95.2	21
TOTAL	21.8	19.5	0.7	1.0	57.0	293

[a] χ^2 test is significant at $p \geq .95$ for those aware of bears vs. others.

Table 40. LEVEL OF ANNUAL NUISANCE ACTIVITY ACCEPTABLE TO CORPORATE LANDOWNERS, BY AWARENESS OF BEARS

Awareness of Bears[a]	Annual Acceptable Nuisance Activity					Total N
	None	No $ loss	<$100 loss	$100-300 loss	>$300 loss	
	Percent					
Not aware of bears	63.9	29.8	2.1	2.1	2.1	47
Aware of bears	33.5	40.9	16.7	4.7	4.2	215
Don't know	85.0	5.0	10.0	0.0	0.0	20
TOTAL	42.3	36.5	13.8	3.9	3.5	282

[a] χ^2 test is significant at $p \geq .95$ for those aware of bears vs. others.

Table 41. IMPORTANCE TO CORPORATE LANDOWNERS OF MAINTAINING THE BLACK BEAR POPULATION, BY AWARENESS OF BEARS

Awareness of Bears[a]	Importance Indicator: Protect Habitat Through Land Use Regulations	Balance of Human and Bear Needs	Only to Extent That Doesn't Conflict With Human Land Use Needs	Human Land Used Needs Are More Important Than Bears	Total N
	Percent				
Not aware of bears	9.5	26.2	33.3	31.0	42
Aware of bears	20.7	40.6	30.6	8.1	222
Don't know	17.6	23.5	11.8	47.1	17
TOTAL	18.9	37.3	29.9	13.9	281

[a] X^2 test is significant at $p \geq .95$ for those aware of bears vs. others.

Table 42. BEAR POPULATION TREND DESIRED BY CORPORATE LANDOWNERS, BY AWARENESS OF BEARS

Awareness of Bears[a]	Bear Population Trend Desired: Increase	No Increase	Don't Know	Total N
	Percent			
Not aware of bears	8.3	33.3	58.4	48
Aware of bears	51.8	18.3	29.9	224
Don't know	9.5	19.0	71.5	21
TOTAL	41.7	20.8	37.5	293

[a] X^2 is significant at $p \geq .95$ for those aware of bears vs. others.

Comparison of Corporation Representatives With vs. Without Bear Sightings Reported on Their Property

As with the previous group of comparisons, few respondents indicated that bear sightings had been reported on their corporation's property. Consequently, comparisons of those with vs. without a history of sightings were not made on a range-by-range basis; aggregate data were used. Although these aggregates have the possible geographic bias described on page 53, they give the reader some indication of where major differences may exist between those with vs. without bear sightings.

Opinions about bear behavior were given most frequently by people from corporations which had bear sightings on their land. Typically, the greatest proportion of those without bear sightings indicated that they were not familiar with bears (65 percent), while most of the others thought bears were timid (23 percent) or seldom caused damage (10 percent). For corporations which had reports of bear sightings, the greatest proportion typically indicated that bears seldom cause damage (46 percent). Similar proportions of those remaining indicated either that they were not adequately familiar with bears to give an opinion (28 percent) or that bears are timid (23 percent). Very few respondents believed bears often cause damage or considered bears to be a menace (Table 43).

Table 43. CORPORATION REPRESENTATIVES' ATTITUDES TOWARD BEARS, BY SIGHTINGS ON PROPERTY

Sightings of Bears[a]	Attitude					Total N
	Timid	Seldom Damage	Often Damage	Menace	Not Familiar With Bears	
No sightings reported	23.4	10.1	0.0	1.3	65.2	158
Sightings reported	23.0	45.8	1.4	1.4	28.4	74
Don't know if sightings were reported	16.4	11.5	1.6	0.0	70.5	61
TOTAL	21.8	19.5	0.7	1.0	57.0	293

[a] X^2 test is significant at $p \geq .95$ for those with sightings reported vs. others.

Nuisance activity was not acceptable to one-half of the corporations on whose land bear had never been sighted, compared to one-quarter of the corporations where bear had been reported. Nearly one-half of the corporations reporting bear sightings considered occasional annoyance acceptable, and the remaining one-quarter indicated that some economic loss would be acceptable (Table 44).

Table 44. LEVEL OF ANNUAL NUISANCE ACTIVITY ACCEPTABLE TO CORPORATE LANDOWNERS, BY SIGHTINGS ON PROPERTY

Sightings of Bears[a]	Annual Acceptable Nuisance Activity					Total N
	None	No $ loss	<$100 loss	$100-300 loss	>$300 loss	
	Percent					
No sightings reported	50.3	31.6	10.3	3.9	3.9	155
Sightings reported	24.3	48.6	15.7	5.7	5.7	70
Don't know if sightings were reported	42.1	35.1	21.1	1.8	0.0	57
TOTAL	42.3	36.5	13.8	3.9	3.5	282

[a] χ^2 test is significant at $p \geq .95$ for those with sightings reported vs. others.

Effects of Doubling the Bear Population: A plurality of representatives from both those corporations which had and did not have bear sightings believed that doubling the bear population: (1) would increase desirable observations of bears (80 and 65 percent, respectively), (2) would increase interest in bear hunting (92 and 78 percent, respectively), (3) would not increase their business or land value (71 and 57 percent, respectively), and (4) would not decrease their business or land value (81 and 45 percent, respectively). The greatest proportion of those who had experienced bear sightings believed doubling the bear population would not cause increased nuisance situations, increased safety risks, or increased vehicle-bear highway accidents; responses of representatives

from those corporations without bear sightings were nearly evenly split as to the effect of doubling the population. Most respondents who gave an opinion, regardless of whether or not the corporation they represented ever had bear sightings, thought doubling the bear population would make little or no perceivable difference in bear-human interaction (Table 45).

Table 45. CORPORATE LANDOWNERS' OPINIONS OF THE EFFECT OF DOUBLING THE CATSKILL BEAR POPULATION, BY BEAR SIGHTINGS ON PROPERTY

Would doubling the bear population...

	No	Yes	Don't Know	Total N
	Percent			
Increase observations?[a]				
No sightings reported	7.8	65.4	26.8	153
Sightings reported	1.3	80.0	18.7	75
Don't know if sightings were reported	0.0	68.4	31.6	57
TOTAL	4.6	69.8	25.6	285
Increase bear hunting?[a]				
No sightings reported	4.6	78.4	17.0	153
Sightings reported	4.1	91.8	4.1	73
Don't know if sightings were reported	0.0	64.3	35.7	56
TOTAL	3.5	79.1	17.4	282
Increase nuisance?[a]				
No sightings reported	31.8	29.1	39.1	151
Sightings reported	55.6	20.8	23.6	72
Don't know if sightings were reported	33.9	23.2	42.9	56
TOTAL	38.4	25.8	35.8	279

(cont'd)

Table 45 (cont'd). CORPORATE LANDOWNERS' OPINIONS OF THE EFFECT OF DOUBLING THE CATSKILL BEAR POPULATION, BY BEAR SIGHTINGS ON PROPERTY

Would doubling the bear population...

	No	Yes	Don't Know	Total N
	Percent			
Increase safety risks?				
No sightings reported	35.9	34.0	30.1	153
Sightings reported	54.2	22.2	23.6	72
Don't know if sightings were reported	35.7	26.8	37.5	56
TOTAL	40.6	29.5	29.9	281
Increase bear-vehicle accidents?				
No sightings reported	35.5	30.3	34.2	152
Sightings reported	42.3	16.9	40.8	71
Don't know if sightings were reported	25.0	32.1	42.9	56
TOTAL	35.1	27.2	37.7	279
Increase business value?[a]				
No sightings reported	56.7	10.0	33.3	150
Sightings reported	71.4	15.7	12.9	70
Don't know if sightings were reported	37.5	8.9	53.6	56
TOTAL	56.6	11.2	32.2	276
Decrease business value?[a]				
No sightings reported	45.1	17.2	37.7	151
Sightings reported	80.9	5.9	13.2	68
Don't know if sightings were reported	39.7	5.2	55.1	58
TOTAL	52.7	11.9	35.4	277

(cont'd)

Table 45 (cont'd). CORPORATE LANDOWNERS' OPINIONS OF THE EFFECT OF DOUBLING THE CATSKILL BEAR POPULATION, BY BEAR SIGHTINGS ON PROPERTY

Would doubling the bear population...

Have little or no perceivable difference in bear- human interaction?[a]	No	Yes	Don't Know	Total N
	Percent			
No sightings reported	14.7	43.0	42.3	156
Sightings reported	17.4	59.4	23.2	69
Don't know if sightings were reported	6.9	27.6	65.5	58
TOTAL	13.8	43.8	42.4	283

[a] X^2 test is significant at $p \geq .95$ for those with sightings reported vs. others.

Maintaining the bear population was given somewhat more support by corporations with than without bear sightings reported (Table 46).

An increasing black bear population trend was desired by 64 and 38 percent, respectively, of the corporations which did and did not report bear sightings. Advocacy of no increase in the bear population was greater among corporations without bear sightings (25 vs. 15 percent) (Table 47).

Table 46. IMPORTANCE TO CORPORATE LANDOWNERS OF MAINTAINING THE BLACK BEAR POPULATION, BY SIGHTINGS ON PROPERTY

Sightings of Bears	Importance Indicator: Protect All Bear Habitat	Realistic Balance of Bear-Human Needs	Only If No Conflict With Human Needs	Human Land Needs Are More Important Than Bears	Total N
	Percent				
No sightings reported	21.4	31.8	27.3	19.5	154
Sightings reported	23.3	41.1	31.5	4.1	73
Don't know if sightings were reported	5.6	48.1	35.2	11.1	54
TOTAL	18.9	37.3	29.9	13.9	281

Table 47. FUTURE BEAR POPULATION TREND DESIRED BY CORPORATION REPRESENTATIVES, BY SIGHTINGS ON PROPERTY

Sightings of Bear[a]	Future Bear Trend Desired: Increase	No Increase	Don't Know	Total N
	Percent			
No sightings reported	38.3	25.2	36.5	159
Sightings reported	63.9	15.3	20.8	72
Don't know if sightings were reported	24.2	16.1	59.7	62
TOTAL	41.7	20.8	37.5	293

[a] χ^2 test is significant at $p \geq .95$ for those with sightings reported vs. others.

PRIVATE LANDOWNER SURVEY

Characteristics of Landowners

Sex: The majority of responding landowners were male. Little variation was observed between the proportion of resident vs. absentee landowners who were male in any bear range (Table E-1).

Age: The mean age of both resident and absentee landowners was 53. Mean age varied little between ranges or between resident vs. absentee landowners within ranges. About four-fifths of the respondents were 40 years of age or older and two-thirds were distributed between 40 and 69 (Table E-2).

Occupation: The occupational categories reported most frequently by resident landowners were retired and white-collar (28 percent), and that reported most frequently by absentee landowners was white collar (42 percent); for each bear range, a greater proportion of absentee than resident landowners held white collar jobs. Most of the other respondents were retired or were blue collar workers. Ten percent of resident landowners were farmers (Table E-3).

Residence: Four out of five resident landowners reported living in rural areas; a plurality of these lived in rural areas which were predominately forested. About one-half of the absentee landowners lived in rural areas; half of these people lived in areas that were predominately forested. About 36 percent of absentee landowners resided in municipalities of 5,000 or more people; only 2 percent of the resident landowner population lived in such areas (thus a few people had different addresses than indicated on the tax records, since landowners whose addresses indicated they were living in cities were not included in the resident landowner sample). The greatest proportion of resident landowners from each range (a majority in the occupied ranges) lived in forested, rural areas (Table E-4).

Awareness that Black Bears Live in the Catskills: The vast majority of respondents were aware that black bears live in the Catskills. The extent of this awareness was greatest among respondents owning land in the occupied ranges, and among residents vs. absentees in all ranges (although the difference between residents and absentees was not significant [$p \geq .95$] in the S. Unoccupied range) (Table 48).

Respondents' Utilization of the Bear Resource: Most respondents indicated some interest in black bears. About seven out of ten indicated they liked knowing that bears continue to exist in the Catskills. From 20 to 50 percent liked to observe bears, while about 10 to 25 percent liked to hunt or photograph them. Observation of bears was indicated more often by landowners from the occupied vs. unoccupied ranges, and more often by resident vs. absentee landowners in the occupied ranges. Interest in black bears was slightly less in the S. Unoccupied range than in other areas (Table 49).

Awareness of DEC's Catskill Black Bear Study: Overall, significantly more ($p \geq .95$) resident than absentee landowners (30 vs. 20 percent) reported that they were aware of DEC's black bear research in the Catskills. The extent of respondents' awareness of the study was slightly greater among people owning land in the occupied bear ranges than in the unoccupied ranges (Table E-5).

Black Bear Hunting

A significantly greater proportion ($p \geq .95$) of resident vs. absentee landowners (46 vs. 34 percent) hunted. A slight majority of resident landowners from both occupied ranges were hunters, whereas the majority of resident landowners from the unoccupied ranges were nonhunters. In all bear ranges the majority of absentee landowners were nonhunters. Most hunters indicated that they hunted big game. Additionally, about three out of five big game hunters, regardless of whether they were resident or absentee landowners, indicated they would shoot a bear if they had the opportunity (Table E-6).

Table 48. PRIVATE LANDOWNERS' AWARENESS THAT BLACK BEARS LIVE IN THE CATSKILL REGION, BY RANGE

Bear Range / Residence Status	Not Aware of Bear	Aware of Bear	Total N
	Percent		
Northern Occupied[a]			
Resident	4.8	95.2	186
Absentee	18.1	81.9	199
Northern Unoccupied[a]			
Resident	11.7	88.3	248
Absentee	23.5	76.5	234
Southern Occupied[a]			
Resident	5.2	94.8	194
Absentee	20.4	79.6	167
Southern Unoccupied			
Resident	14.6	85.4	171
Absentee	23.8	76.2	143
Aggregate[b]			
Resident	9.1	90.9	799
Absentee	21.4	78.6	743

[a] χ^2 test between resident vs. absentee is significant at $p \geq .95$ for this bear range.

[b] χ^2 test between resident vs. absentee is significant at $p \geq .95$.

Table 49. WAYS PRIVATE LANDOWNERS ENJOY BEARS, BY RANGE

Bear Range / Residence Status	Observe		Photograph		Hunt		Know of Their Existence		No Interest		Total N
	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No	
	Percent										
Northern Occupied											
Resident	44.8 [a]	55.2	11.0	89.0	25.4	74.6	79.0 [a]	21.0	11.0 [a]	89.0	181
Absentee	32.2	67.8	12.1	87.9	21.6	78.4	69.3	30.7	19.1	80.9	199
Northern Unoccupied											
Resident	26.6	73.4	11.5	88.5	13.5	86.5	70.9	29.1	18.9	81.1	244
Absentee	25.2	74.8	11.7	88.3	13.0	87.0	77.0	23.0	17.0	83.0	230
Southern Occupied											
Resident	49.7 [a]	50.3	16.6	83.4	25.4 [a]	74.6	77.2	22.8	13.0 [a]	87.0	193
Absentee	31.3	68.7	12.7	87.3	14.5	85.5	72.9	27.1	24.1	75.9	166
Southern Unoccupied											
Resident	22.2	77.8	10.8	89.2	12.6	87.4	64.1	35.9	25.1	74.9	167
Absentee	17.0	83.0	11.3	88.7	8.5	91.5	66.0	34.0	30.5	69.5	141
Aggregate											
Resident	35.5 [b]	64.5	12.5	87.5	19.0 [b]	81.0	72.9	27.1	16.9 [b]	83.1	785
Absentee	26.9	73.1	12.0	88.0	14.8	85.2	71.9	28.1	21.7	78.3	736

[a] χ^2 test between resident vs. absentee is significant at $p \geq .95$ for this bear range and manner of enjoyment.

[b] χ^2 test between resident vs. absentee is significant at $p \geq .95$ for this manner of enjoyment.

Respondents were not in agreement about the necessity of hunting to insure that bear numbers are compatible with human land uses and available bear habitat. Majority opinion was split in all ranges for both resident and absentee landowners (Table E-7).

Contact With Black Bears

Sightings: Bear sightings were reported by greater proportions of respondents from the occupied ranges than from the unoccupied ranges and by more resident than absentee landowners in all ranges (although the difference was not significant in the S. Unoccupied range)(Table 50). About one-third of those who had seen a bear also reported they had seen a bear on their own property. Among the bear ranges, from 33 to 42 percent of resident landowners and from 21 to 46 percent of absentee landowners who saw a bear reported they had seen a bear on their own property. Only slightly greater proportions of people owning land in the occupied than in the unoccupied ranges saw a bear on their own property, and only slightly greater proportions of resident than absentee landowners saw a bear on their own property (Table 51).

The proportion of respondents who reported sightings of bears in 1977 was similar to that in 1976 for both resident (10 and 9 percent, respectively) and absentee (5 and 5 percent, respectively) landowners. Bear sightings were reported by somewhat greater proportions of resident and absentee landowners from the S. Occupied range than from their counterparts in the other bear ranges, and by significantly ($p \geq .95$) more resident than absentee landowners in that range for both 1976 and 1977 (Table 52).

Resident landowners reported sighting bears more often than absentee landowners (using mean number of bears sighted as an indicator of sightings) in both 1976 and 1977. This trend was observed among landowners of each bear range; however, the differences were significant ($p \geq .95$) only in the S. Occupied range. A significant decrease in sightings from 1976 to 1977 was indicated by resident landowners of the S. Occupied range (Table 53).

Table 50. INCIDENCE OF BEAR SIGHTINGS BY PRIVATE LANDOWNERS, BY RANGE

Bear Range Residence Status	Sighting	No Sighting	Total N
	Percent		
Northern Occupied[a]			
Resident	48.9	51.1	188
Absentee	31.2	68.8	199
Northern Unoccupied[a]			
Resident	26.2	73.8	248
Absentee	14.5	85.5	234
Southern Occupied[a]			
Resident	63.2	36.8	193
Absentee	36.5	63.5	167
Southern Unoccupied			
Resident	26.3	73.7	171
Absentee	21.0	79.0	143
Aggregate[b]			
Resident	40.5	59.5	800
Absentee	25.2	74.8	743

a χ^2 test between resident vs. absentee is significant at $p \geq .95$ for this bear range.

b χ^2 test between resident vs. absentee is significant at $p \geq .95$.

Table 51. INCIDENCE OF BEAR SIGHTINGS ON PRIVATE LANDOWNERS' PROPERTY, BY RANGE

Bear Range / Residence Status	All Respondents: Percent with Sightings on Property	All Respondents: Percent without Sightings on Property	All Respondents: Total N	Respondents Who Reported Bear Sightings: Percent with Sightings on Property	Respondents Who Reported Bear Sightings: Percent without Sightings on Property	Respondents Who Reported Bear Sightings: Total N
Northern Occupied						
Resident	16.0	84.0	187	33.0	67.0	91
Absentee	9.5	90.5	199	30.6	69.4	62
Northern Unoccupied						
Resident	9.3 [a]	90.7	248	35.4	64.6	65
Absentee	3.0	97.0	233	21.2	78.8	33
Southern Occupied						
Resident	26.5	73.5	189	42.4	57.6	118
Absentee	17.5	82.5	166	45.9	54.1	61
Southern Unoccupied						
Resident	9.4	90.6	170	34.1	65.9	44
Absentee	9.8	90.2	143	43.3	56.7	30
Aggregate						
Resident	15.0 [b]	85.0	794	37.1	62.9	318
Absentee	9.3	90.7	741	36.0	64.0	186

[a] χ^2 test between resident vs. absentee is significant at $p \geq .95$ for this bear range.

[b] χ^2 test between resident vs. absentee is significant at $p \geq .95$.

Table 52. INCIDENCE OF BEAR SIGHTINGS IN 1977, 1976, AND PRIOR TO 1976, BY RANGE

Bear Range / Residence Status	1977 Percent with Sightings		1977 Percent without Sightings	1976 Percent with Sightings		1976 Percent without Sightings	Prior to 1976 Percent with Sightings		Prior to 1976 Percent without Sightings	Total N
Northern Occupied										
Resident	7.4		92.6	5.9		94.1	45.2	a	54.8	188
Absentee	4.5		95.5	2.5		97.5	27.6		72.4	199
Northern Unoccupied										
Resident	4.4		95.6	6.0		94.0	21.8	a	78.2	248
Absentee	3.0		97.0	4.7		95.3	12.0		88.0	234
Southern Occupied										
Resident	19.7	a	80.3	19.2	a	80.8	57.5	a	42.5	193
Absentee	8.4		91.6	8.4		91.6	32.3		67.7	167
Southern Unoccupied										
Resident	7.6		92.4	5.3		94.7	22.2		77.8	171
Absentee	7.0		93.0	4.2		95.8	18.2		81.8	143
Aggregate										
Resident	9.5	b	90.5	9.0	b	91.0	36.0	b	64.0	800
Absentee	5.4		94.6	4.8		95.2	21.9		78.1	743

[a] χ^2 test between resident vs. absentee is significant at $p \geq .95$ for this bear range.

[b] χ^2 test between resident vs. absentee is significant at $p \geq .95$.

Table 53. BEAR SIGHTINGS (SUMS AND MEANS) REPORTED BY PRIVATE LANDOWNERS IN 1976 AND 1977, BY RANGE

Bear Range / Residence Status	Bear Sightings in 1976 Total	Bear Sightings in 1976 Mean	Bear Sightings in 1977 Total	Bear Sightings in 1977 Mean
Northern Occupied				
Resident	16	.086	17	.092
Absentee	5	.025	7	.036
Northern Unoccupied				
Resident	21	.085	15	.061
Absentee	14	.060	14	.060
Southern Occupied				
Resident[b]	82	.425	55	.297
Absentee	30	.181[a]	24	.146[a]
Southern Unoccupied				
Resident	15	.088	16	.094
Absentee	7	.049	9	.064
Aggregate				
Resident	134	.168	103	.131
Absentee	56	.076[a]	54	.073[a]

[a] t-test significant ($p \geq .95$) for a difference in means between resident vs. absentees for the given year.

[b] t-test significant ($p \geq .95$) for difference in means between 1976 vs. 1977 for the given residence category.

Problems: Only 2 percent of the responding resident landowners and 1 percent of the absentee landowners experienced problems from black bear at any time in the past. In total, only 27 problems were reported; 5 occurred in 1977, 1 occurred in 1976, and 19 occurred sometime prior to 1976 (respondents failed to give dates for the two remaining problems). The majority of the problems occurred in the occupied ranges (20/27) or were reported by resident landowners (21/27). Twelve of the problems were instances where bears were a nuisance (9) or frightened someone (3), while the remaining 15 were cases where property damage occurred (6 of these were beehive damage). No cases of human injury were reported (Table 54). Only four nuisance experiences were reported to DEC, and 2 respondents were satisfied with DEC's assistance.

Total monetary loss reported by 14 respondents due to bear problems was $1,485. Of this, $420 was incurred in 1977; $20 was incurred in 1976; and the remaining $1,045 was incurred sometime prior to 1976. Losses reported ranged from $5 to $350, for an average of about $106 per respondent with damage. In both 1976 and 1977, all monetary losses reported were from the occupied bear ranges, while prior to 1976 the unoccupied ranges had reports of light damage ($170 of $1,045).

Attitudes About Black Bears

Assessments of the trends in the black bear population from 1960-1970 and from 1970-1977 were not offered by the majority of landowners. Respondents owning land in the occupied ranges were generally more willing than those owning land in the unoccupied ranges to state an opinion; this tendency was most marked among resident landowners. With one exception (resident, S. Occupied, 1960-1970), for both resident and absentee landowners in all ranges, for both time periods, a plurality of those who indicated a trend thought that the bear population had decreased or remained the same (Table 55).

Table 54. INCIDENCE OF BEAR PROBLEMS EXPERIENCED BY PRIVATE LANDOWNERS, BY RANGE

Bear Range Residence Status	Percent Reporting A Problem	1977	1976	Prior to 1976	Total	Frightened	Nuisance	Beehive Damage	Car Damage	Livestock Damage	Property Damage	Orchard Damage	Total N
		Number											
Northern Occupied													
Resident	3.7	1	0	6	7	1	1	3	1	1			187
Absentee	0.5	0	0	1	1			1					198
Northern Unoccupied													
Resident	0.8	0	0	2	2					1	1		247
Absentee	1.3	0	0	1	1				1				232
Southern Occupied													
Resident	3.1	1	0	8	9	1	3	2		2		1	195
Absentee	1.2	1	1	0	2		3						166
Southern Unoccupied													
Resident	1.8	2	0	1	3	1	1				1		171
Absentee	0.7	0	0	0	0		1						139
Aggregate													
Resident	2.3	4	0	17	21	3	5	5	1	4	2	1	800
Absentee	1.0	1	1	2	4		4	1	1				734

Table 55. PRIVATE LANDOWNERS' ASSSESSMENT OF THE BEAR POPULATION TRENDS, FROM 1960-1970 AND 1970-1977, BY RANGE

Bear Range / Residence Status	Assessments of 1960-1970 Bear Population Trend: Increased	Remained the Same	Decreased	Don't Know	Total N
	Percent				
Northern Occupied[a]					
Resident	2.9	13.8	13.2	70.1	174
Absentee	3.3	6.1	8.3	82.2	180
Northern Unoccupied					
Resident	2.2	7.9	4.8	85.0	227
Absentee	2.9	3.3	4.3	89.5	209
Southern Occupied[a]					
Resident	15.2	12.6	6.8	65.4	191
Absentee	3.8	6.3	3.8	86.1	158
Southern Unoccupied					
Resident	0.6	6.9	6.3	86.3	160
Absentee	0.8	3.0	6.8	89.4	132
Aggregate[a]					
Resident	5.3	10.2	7.6	76.9	752
Absentee	2.8	4.7	5.7	86.8	679
	Assessments of 1970-1977 Bear Population Trend				
Northern Occupied					
Resident	5.0	12.7	17.7	64.6	181
Absentee	2.7	8.6	12.4	76.3	186
Northern Unoccupied					
Resident	5.7	7.8	7.4	79.1	230
Absentee	3.3	2.3	6.1	88.3	214
Southern Occupied[a]					
Resident	5.7	16.7	21.9	55.7	192
Absentee	3.1	3.8	10.0	83.1	160
Southern Unoccupied[a]					
Resident	1.9	11.5	6.4	80.3	157
Absentee	3.8	3.0	8.3	85.0	133
Aggregate[b]					
Resident	4.7	12.0	13.3	70.0	760
Absentee	3.2	4.5	9.1	83.2	693

[a] X^2 test between resident vs. absentee is significant at $p \geq .95$ for this bear range.

[b] X^2 test between resident vs. absentee is significant at $p \geq .95$.

Factors believed to have the greatest influence on increases and decreases in the black bear population were the availability of food and the amount of forested land. Except for resident landowners in the N. Occupied range, who felt food and hunting had the greatest influence on bear numbers, response frequencies were relatively similar between ranges and between resident and absentee landowners within ranges (Table 56). A plurality of landowners, both resident and absentee in all ranges, believed that the amount of forested land in the Catskills had been decreasing over the past 20 years (Table 57).

Attitudes about the behavior of bears were not widely developed among the landowners surveyed. A plurality of resident and absentee landowners from all ranges who indicated an attitude either believed bears are timid and stay away from people and residences or believed bears occasionally approach residences but seldom cause damage. In the N. and S. Occupied ranges responses of resident and absentee landowners differed significantly. A greater proportion of resident landowners (48 vs. 28 percent) in the N. Occupied range believed black bears are timid, and in the S. Occupied range somewhat larger proportions of resident than absentee landowners believed bears are timid (35 vs. 22 percent) or seldom cause damage (38 vs. 29 percent) (Table 58).

With one exception (absentee, S. Unoccupied), when respondents were asked where they personally would like to see a bear, a plurality of both resident and absentee landowners from each range indicated they would occasionally like to see a bear on their own property. From 14 to 28 percent of resident landowners and 20 to 32 percent of absentee landowners would like to have their bear sightings restricted to remote areas of the Catskill Mountains. Few respondents, regardless of residence status or bear range, had no interest in ever seeing a bear in the wild (Table 59).

Table 56. PRIVATE LANDOWNERS' PERCEPTION OF FACTORS AFFECTING THE BEAR POPULATION, BY RANGE

Bear Range / Residence Status	Factors					Total N
	Amount of Forested Land	Food Availability	Human Recreational Use of Land	Hunting	Other[a]	
	Percent					
Northern Occupied						
Resident	17.3	31.5	9.5	24.4	17.3	168
Absentee	24.7	30.0	12.1	16.8	16.3	190
Northern Unoccupied						
Resident	32.9	30.3	15.4	9.4	12.0	234
Absentee	25.9	29.2	13.9	13.0	18.1	216
Southern Occupied						
Resident	24.3	29.2	10.3	20.5	15.6	185
Absentee	27.0	25.8	11.9	18.9	16.3	159
Southern Unoccupied						
Resident	29.7	23.2	11.0	16.8	19.4	155
Absentee	27.8	26.3	15.0	19.5	11.3	133
Aggregate						
Resident	26.5	28.9	11.9	17.1	15.6	742
Absentee	26.2	28.1	13.2	16.6	15.9	698

[a] Includes accidents, multiple responses, and "don't know."

Table 57. PRIVATE LANDOWNERS' PERCEPTION OF THE TREND IN THE AMOUNT OF FORESTED LAND IN THE CATSKILLS IN THE PAST 20 YEARS, BY RANGE

Bear Range / Residence Status	Trend in Amount of Forested Land				Total N
	Increasing	Decreasing	Remained the Same	Don't Know	
	Percent				
Northern Occupied[a]					
Resident	15.8	42.1	21.9	20.2	183
Absentee	6.6	50.8	16.8	25.9	197
Northern Unoccupied					
Resident	14.3	37.1	17.1	31.4	245
Absentee	10.0	43.7	13.9	32.5	231
Southern Occupied[a]					
Resident	12.4	47.9	19.6	20.1	194
Absentee	4.8	48.5	16.4	30.3	165
Southern Unoccupied					
Resident	8.3	41.4	18.3	32.0	169
Absentee	2.8	49.6	12.1	35.5	141
Aggregate[b]					
Resident	12.9	41.8	19.1	26.2	791
Absentee	6.5	47.8	14.9	30.8	734

[a] X^2 test between resident vs. absentee is significant at $p \geq .95$ for this bear range.

[b] X^2 test between resident vs. absentee is significant at $p \geq .95$.

Table 58. ATTITUDES OF PRIVATE LANDOWNERS TOWARD THE BEHAVIOR OF BLACK BEAR, BY RANGE

Bear Range / Residence Status	Attitude: Timid	Seldom Damage	Often Damage	Menace	Not Familiar with Bear	Total N
	Percent					
Northern Occupied[a]						
Resident	48.4	20.1	1.1	2.2	28.3	184
Absentee	27.9	26.9	1.0	2.0	42.1	197
Northern Unoccupied						
Resident	29.9	23.4	1.2	3.3	42.2	244
Absentee	24.9	21.5	2.1	0.9	50.6	233
Southern Occupied[a]						
Resident	35.4	37.9	1.5	1.0	24.1	195
Absentee	21.8	29.1	3.0	2.4	43.6	165
Southern Unoccupied						
Resident	27.2	24.9	1.2	1.8	45.0	169
Absentee	16.3	24.8	2.1	2.1	54.6	141
Aggregate[b]						
Resident	35.0	26.5	1.3	2.1	35.1	792
Absentee	23.4	25.3	2.0	1.8	47.5	736

[a] χ^2 test between resident vs. absentee is significant at $p \geq .95$ for this bear range.

[b] χ^2 test between resident vs. absentee is significant at $p \geq .95$.

Table 59. PROXIMITY OF BEAR SIGHTINGS DESIRED BY PRIVATE LANDOWNERS, BY RANGE

Bear Range / Residence Status	Proximity of Sightings Desired					Total N
	On Own Property	Near Own Property	Nearby Undeveloped Lands	In Remote Areas of Catskills	Never	
	Percent					
Northern Occupied[a]						
Resident	46.4	4.4	21.9	18.6	8.7	183
Absentee	37.5	10.9	16.1	24.5	10.9	192
Northern Occupied						
Resident	35.4	6.6	16.5	28.4	13.2	243
Absentee	41.2	2.6	19.7	27.2	9.2	228
Southern Occupied[a]						
Resident	52.1	10.3	14.4	13.9	9.3	194
Absentee	41.1	6.1	15.3	20.2	17.2	163
Southern Unoccupied						
Resident	32.9	6.6	21.6	26.3	12.6	167
Absentee	27.3	5.0	18.0	31.7	18.0	139
Aggregate						
Resident	41.5	7.0	18.3	22.1	11.1	787
Absentee	37.4	6.1	17.5	25.8	13.2	722

[a] X^2 test between resident vs. absentee is significant at $p \geq .95$ for this bear range.

Landowners' tolerance for black bear nuisance activity was demonstrated by the plurality of both residents and absentees in each range who reportedly would find occasional annoyance from bears acceptable and by the many who would find annoyance and some degree of economic loss acceptable. Only about one respondents out of five (residents, 16-22 percent; absentees, 15-27 percent) indicated that no degree of annual nuisance activity from black bears would be acceptable. Although these trends were relatively consistent across the four bear ranges, respondents from the N. Occupied range were most tolerant of nuisance activity while those from the S. Unoccupied range were least tolerant (Figure 15; Table E-8).

Maintaining a population of black bears in the Catskills was considered important by most respondents regardless of residence, although majority opinion was split on the degree of emphasis to be placed on this. In the N. Occupied range, a plurality of both resident and absentee landowners thought that land use regulations should be employed throughout the Catskills to protect bear habitat. In the other ranges, a plurality of respondents believed that the maintenance of the black bear population should be achieved through a balance of human land use needs and bear habitat requirements. The only significant ($p \geq .95$) difference in responses of absentee and resident landowners occurred in the N. Unoccupied range, where more absentee than resident landowners (38 and 26 percent, respectively) supported the idea of land use regulations to protect bear habitat (Table 60).

Effects of Doubling the Bear Population

The majority of respondents believed that doubling the bear population would result in more opportunities for desirable observations of bears and an increased interest in recreational hunting of bears. These trends were consistent among ranges and between resident and absentee landowners within the ranges (Figure 16; Table E-9).

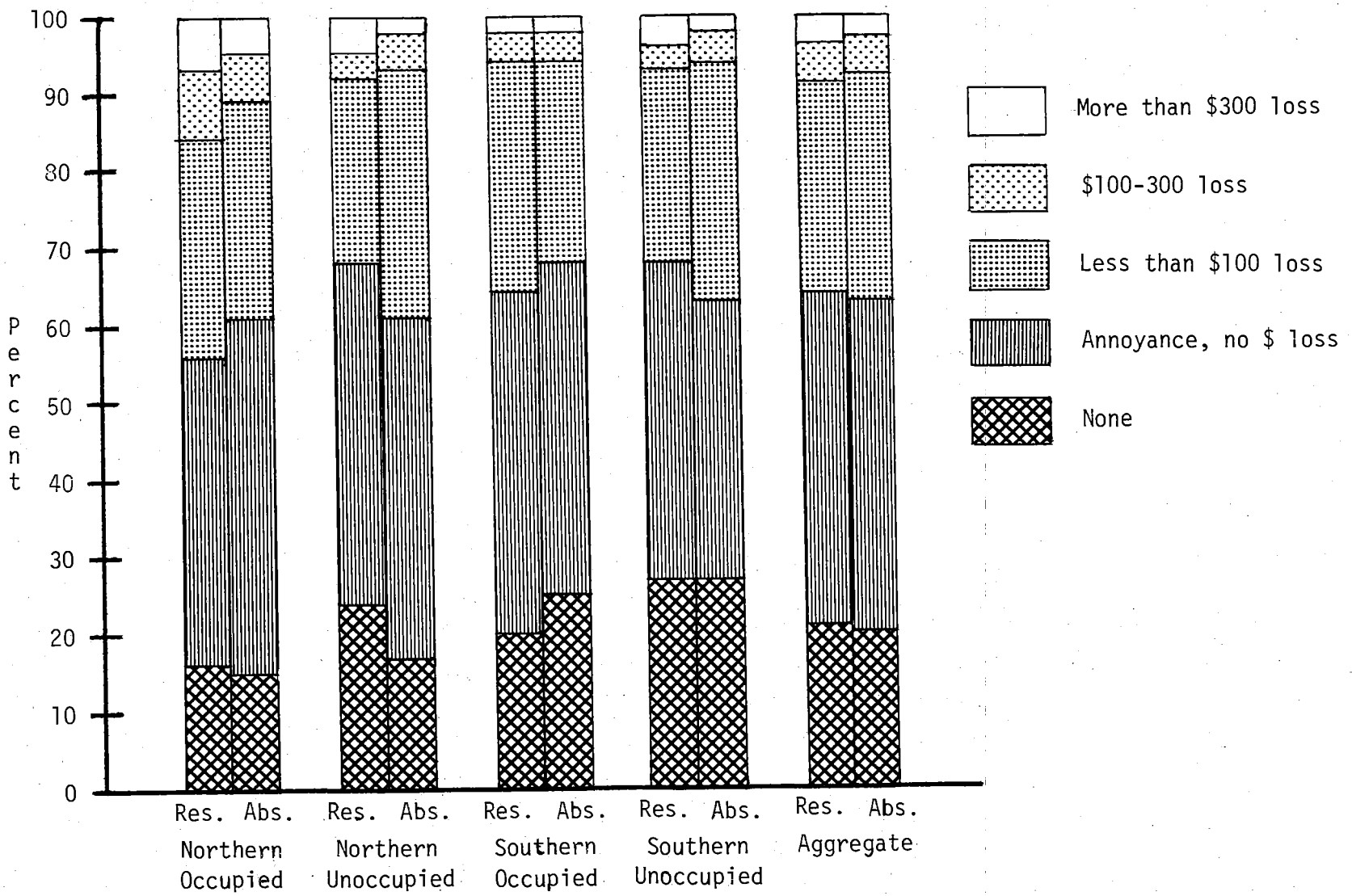

Fig. 15 Level of annual nuisance activity acceptable to private landowners, by range.

Table 60. IMPORTANCE TO PRIVATE LANDOWNERS OF MAINTAINING A POPULATION OF BLACK BEARS IN THE CATSKILLS, BY RANGE

Bear Range / Residence Status	Importance Indicator: Protect Habitat Through Land Use Regulations	Balance of Human and Bear Needs	Only to Extent That It Doesn't Conflict With Human Land Use Needs	Human Land Use Needs Are More Important Than Bears	Total N
	Percent				
Northern Occupied					
Resident	40.6	35.4	20.0	4.0	175
Absentee	40.6	36.5	18.8	4.2	192
Northern Unoccupied[a]					
Resident	26.2	41.4	25.7	6.8	237
Absentee	37.6	40.3	19.5	2.7	221
Southern Occupied					
Resident	34.6	41.5	18.1	5.9	188
Absentee	35.4	39.2	17.7	7.6	158
Southern Unoccupied					
Resident	33.7	44.6	16.9	4.8	166
Absentee	35.5	38.4	18.1	8.0	138
Aggregate					
Resident	33.2	40.7	20.6	5.5	766
Absentee	37.5	38.7	18.6	5.2	709

[a] χ^2 test between resident vs. absentee is significant at $p \geq .95$ for this bear range.

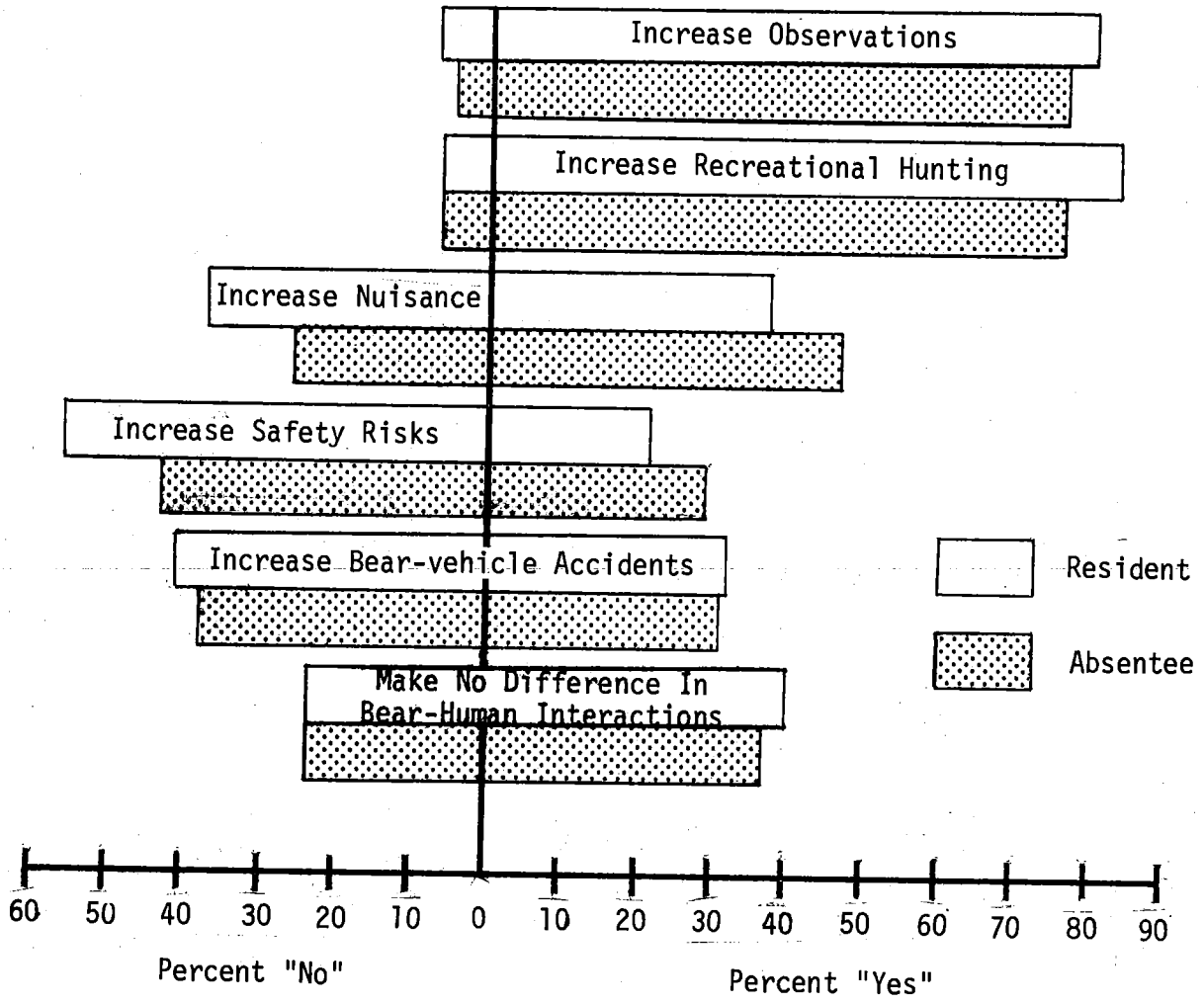

Fig. 16 Private landowners' opinions on the effects of doubling the Catskill black bear population ("don't know" responses omitted).

The belief that more bears would result in increased occurrences of nuisance situations for landowners prevailed among a plurality of respondents from the unoccupied ranges, and among absentee landowners from the occupied ranges (where resident and absentee landowners' responses differed significantly [$p \geq .95$]).

A plurality of the respondents thought that doubling the bear population would not result in increased personal safety risks. Significant differences occurred between resident and absentee landowners' responses in the N. Occupied, S. Occupied, and S. Unoccupied ranges. Noteworthy among these was that 66 and 60 percent of resident landowners vs. 45 and 47 percent of absentee landowners in the N. and S. Occupied ranges, respectively, thought that doubling the bear population would not result in increased personal safety risks for people in the Catskills.

In the N. Occupied and N. Unoccupied ranges, a plurality of both resident and absentee landowners indicated that, in their opinion, bear-vehicle collisions would not increase as a result of doubling the bear population. This opinion was also shared by a plurality of resident landowners in the S. Occupied range. Responses of resident and absentee landowners did not differ significantly in the two northern ranges; however, in the S. Occupied range, more resident than absentee landowners thought collisions would not increase. In the S. Unoccupied range, majority opinion for absentee and resident landowners was nearly equally split between the positive, negative and "don't know" responses.

The statement that doubling the bear population would have little or no perceivable effect on bear-human interaction was met with mixed reactions. About one-quarter or fewer respondents, regardless of range or residence status, answered negatively, i.e. believed that bear-human interaction would change noticeably.

Trends in Future Bear Population Desired by Respondents

An increase in the Catskill bear population was desired by the majority of both resident and absentee landowners in the N. Occupied, N. Unoccupied and S. Occupied bear ranges, and by the majority of resident landowners in the S. Unoccupied range. Advocacy of increasing the bear population was greatest among resident landowners in each range, significantly so in the S. Occupied range. Only twenty percent or less of the landowners (resident or absentee) from any range indicated they did not want the bear population to increase (Figure 17; Table E-10).

Attitudinal Variations by Sex[6]

Proportionately fewer women than men believed bears are timid, and more women reported they were not adequately familiar with bears to give an opinion. A greater proportion of men than women (44 vs. 24 percent) wanted to be able to see a bear on their own property, while more women than men (20 vs. 10 percent) reported no interest in ever seeing a bear in the Catskills. Men also expressed more tolerance than women toward bear nuisance activities. The attitudes of men vs. women on the importance of maintaining a black bear population in the Catskills did not differ greatly; however, a significantly greater ($p \geq .95$) proportion of men than women (65 vs. 39 percent) wanted an increase in the Catskill bear population.

Comparison of Respondents Who Were vs. Were Not Aware That Black Bears Inhabit the Catskills

Relatively small proportions of resident and absentee landowners from each bear range were unaware that bears inhabit the Catskills. Consequently, only aggregate data will be reported in the following comparisons for them.

[6]Since no significant differences were found in the proportions of men vs. women among resident vs. absentee landowners in any bear range (Table E-1), the aggregates of men vs. women for all four ranges were used in these comparisons.

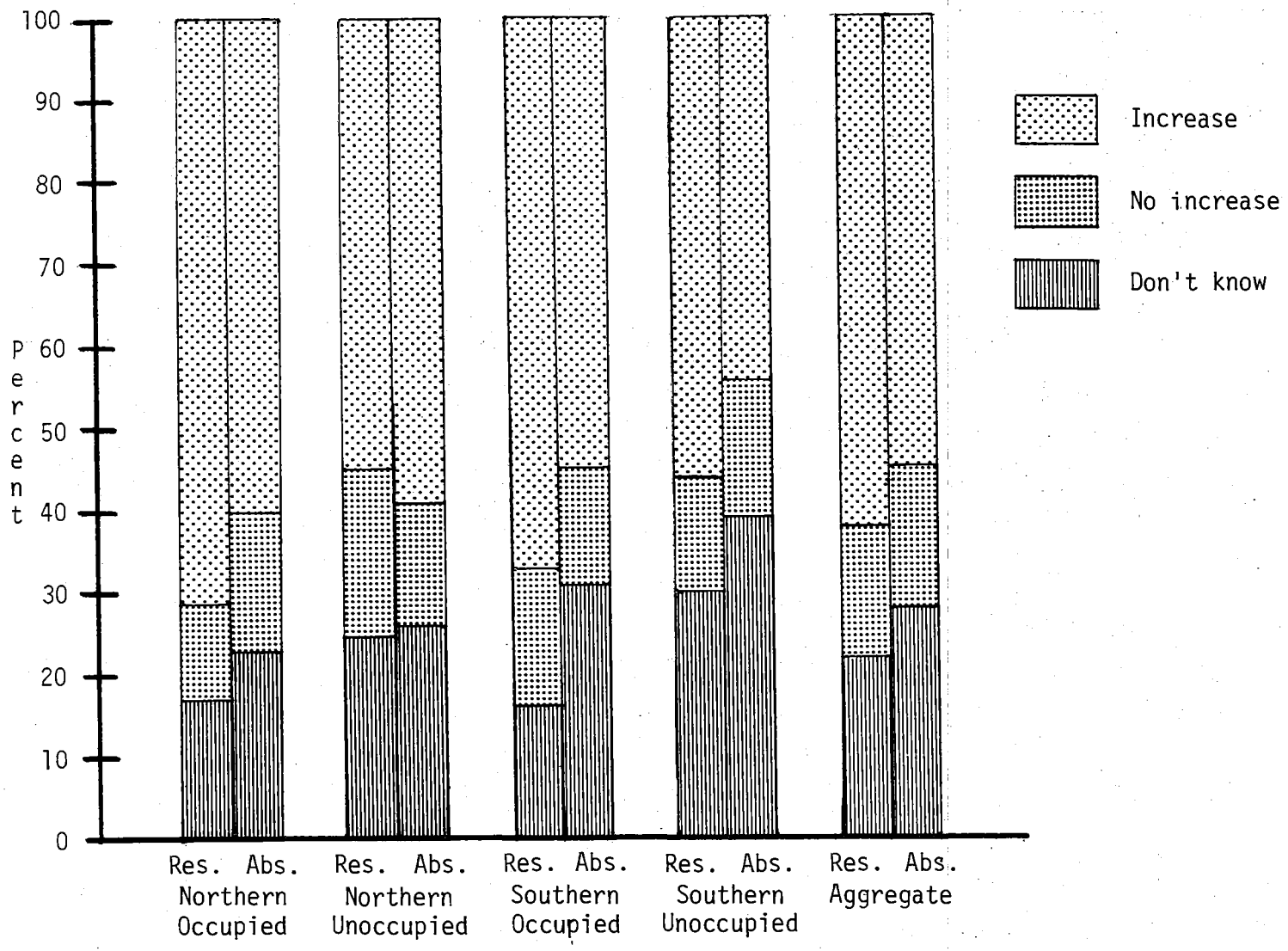

Fig. 17 Future bear population trend desired by private landowners, by range.

Responses about the behavior of bears differed significantly, for both resident and absentee landowners, between those who were vs. were not aware that bears inhabit the Catskills. However, the majority of both resident and absentee landowners who offered an opinion about bear's behavior, regardless of whether or not they were aware of bears, believed either that bears are timid and stay away from people and residences or that bears occasionally approach residences but seldom cause damage (Table 61).

Table 61. PRIVATE LANDOWNERS' ATTITUDES TOWARD BEHAVIOR OF BEAR, BY AWARENESS OF THE PRESENCE OF BLACK BEAR IN THE CATSKILLS

Residence Status	Attitude Toward Behavior of Black Bear					Total N
	Timid	Seldom Damage	Often Damage	Menace	Not Familiar With Bears	
	Percent					
Resident[a]						
Not aware	9.7	6.9	0.0	4.2	79.2	72
Aware[b]	37.4	28.7	1.4	2.0	30.5	714
TOTAL	34.9	26.7	1.3	2.2	35.0	786
Absentee[a]						
Not aware	8.6	6.6	1.3	1.3	82.2	152
Aware[b]	27.3	30.0	2.2	1.9	38.6	583
TOTAL	23.4	25.2	2.0	1.8	47.6	735

[a] X^2 test is significant between "not aware" vs. "aware" for the given residence groups.

[b] X^2 test is significant between residents vs. absentees who were aware of the presence of bears in the Catskills.

Awareness that black bears live in the Catskills was associated with a desire to have the bear population increase. While the majority of resident and absentee landowners (66 and 63 percent, respectively) who were aware of bears wanted an increase, a plurality of respondents who were not aware of bears did not offer an opinion (Table 62).

Table 62. BEAR POPULATION TREND DESIRED BY PRIVATE LANDOWNERS, BY AWARENESS OF THE PRESENCE OF BLACK BEAR IN THE CATSKILLS

Residence Status	Bear Population Trend Desired			Total N
	Increase	No Increase	Don't Know	
	Percent			
Resident[a]				
Not aware	26.8	28.2	45.1	71
Aware	65.5	15.1	19.4	707
TOTAL	62.0	16.3	21.7	778
Absentee[a]				
Not aware	27.8	27.2	45.0	151
Aware	62.9	12.7	24.4	569
TOTAL	55.6	15.7	28.8	720

[a] X^2 is significant between "not aware" vs. "aware" for the given residence group.

The pervasively less positive disposition toward bears of both resident and absentee landowners who were unaware that bear inhabit the Catskills is further supported by their (1) lower tolerance of bear nuisance activity (Table 63), (2) greater desire to restrict personal sightings to remote areas of the Catskill Mountains or never to see a bear (Table 64), and (3) somewhat lower support for maintaining a population of black bears as part of the ecology of the Catskill Region (Table 65).

Table 63. LEVEL OF ANNUAL NUISANCE ACTIVITY ACCEPTABLE TO PRIVATE LANDOWNERS, BY AWARENESS OF THE PRESENCE OF BLACK BEARS IN THE CATSKILLS

Residence Status	Acceptable Annual Nuisance Activity					Total N
	None	Annoyance, no $ loss	<$100 loss	$100-300 loss	>$300 loss	
	Percent					
Resident[a]						
Not aware	56.5	30.4	10.1	1.4	1.4	69
Aware	18.1	43.9	28.5	5.0	4.5	685
TOTAL	21.6	42.7	26.8	4.6	4.2	754
Absentee[a]						
Not aware	37.4	44.9	12.9	3.4	1.4	147
Aware	16.0	42.0	33.8	5.3	2.8	562
TOTAL	20.5	42.6	29.5	4.9	2.5	709

[a] X^2 test is significant between "not aware" vs. "aware" for the given residence group.

Table 64. PRIVATE LANDOWNERS' OPINIONS ON THE RELATIVE PROXIMITY TO THEIR LAND THAT THEY WOULD LIKE TO HAVE BLACK BEARS, BY AWARENESS OF THE PRESENCE OF BLACK BEARS IN THE CATSKILLS

Residence Status	Area Where Personal Bear Sightings Are Preferred					Total N
	On Own Property	Near Own Property	On Nearby Undeveloped Lands	In Remote Areas of Catskill Mts.	Never	
	Percent					
Resident[a]						
Not aware	15.5	4.2	12.7	29.6	38.0	71
Aware	44.2	7.2	19.0	21.4	8.2	710
TOTAL	41.6	6.9	18.4	22.2	10.9	781
Absentee[a]						
Not aware	16.2	2.0	18.2	31.8	31.8	148
Aware	42.9	7.2	17.3	24.3	8.4	573
TOTAL	37.4	6.1	17.5	25.8	13.2	721

[a] X^2 test is significant between "not aware" vs. "aware" for the given residence group.

Table 65. IMPORTANCE TO PRIVATE LANDOWNERS OF MAINTAINING THE CATSKILL BEAR POPULATION, BY RESPONDENTS' AWARENESS OF THE PRESENCE OF BLACK BEARS IN THE CATSKILLS

Residence Status	Importance Indicator: Protect Habitat Through Land Use Regulations	Balance of Human and Bear Needs	Only to Extent That It Doesn't Conflict With Human Land Use Needs	Human Land Use Needs Are More Important Than Bears	Total N
	Percent				
Resident[a]					
Not aware	29.4	26.5	27.9	16.2	68
Aware	33.6	42.2	19.9	4.3	694
TOTAL	33.2	40.8	20.6	5.4	762
Absentee[a]					
Not aware	31.2	34.0	22.7	12.1	141
Aware	39.0	39.9	17.6	3.5	567
TOTAL	37.4	38.7	18.6	5.2	708

[a] χ^2 test is significant between "not aware" vs. "aware" for the given residence group.

Opinions on the effect doubling the bear population would have on the incidence of nuisance situations differed for resident and absentee landowners. More resident landowners who were, vs. those who were not aware of bear, thought nuisance situations would not increase (38 vs. 23 percent), although similar proportions (38 vs. 35 percent) thought nuisances would increase. Among absentee landowners, a plurality of both those who were and those who were not aware of bear thought bear nuisance situations would increase (Table 66).

Most resident and absentee landowners (58 and 50 percent, respectively) who were aware that bears inhabit the Catskills believed doubling the population would not result in an increase in safety risks to people; this opinion was shared by significantly fewer resident and absentee landowners who were not aware of bears (35 and 16 percent, respectively) (Table 66).

A plurality of resident and absentee landowners (43 percent of each) who were aware that bears live in the Catskills believed bear-vehicle collisions would not increase if the population doubled. Those respondents who were not aware of bear, but who had an opinion, were more inclined to believe accidents would increase (Table 66).

Comparison of Respondents Who Have vs. Have Not Seen Bears in the Catskill Region

The desire to have bear populations increase seems to be associated with personal sightings of bear and relatively unaffected by residence status. For both resident and absentee landowners, significantly greater proportions of respondents who had seen bear wanted the bear population to increase (Table 67). This trend was apparent in each bear range, although the differences between those who had vs. those who had not seen a bear were not always significant (Tables E-11 and E-12). Respondents who had seen a bear also were more likely than those who had not to want personal sightings on their property, and were less likely either to want sightings restricted to remote areas of the Catskill Mountains or never to see a bear (Table 68); these trends were found in each bear range for both resident and absentee landowners (Table E-13 and E-14). Acceptance of bear nuisance activity was greater among respondents who had seen bear than among those who hadn't (Table 69; Tables E-15 and E-16).

Overall, landowners' interests in maintaining a population of black bears in the Catskills were similar regardless of whether or not they had ever seen a bear in the Catskills (Table 70). Most respondents, regardless of residence status, bear range or bear sightings reported, indicated one of the two most positive response categories, "protect bear habitat" and "balance human and bear needs" (Tables E-17 and E-18).

Table 66. PRIVATE LANDOWNERS' OPINIONS ON THE EFFECTS OF DOUBLING THE BLACK BEAR POPULATION, BY WHETHER OR NOT RESPONDENTS WERE AWARE THAT BLACK BEAR INHABIT THE CATSKILL REGION

Would doubling the bear population...	No	Yes	Don't Know	Total N
	Percent			
Increase nuisance situations?				
Resident[a]				
Not aware	23.3	35.0	41.7	60
Aware[b]	38.4	37.6	24.1	615
TOTAL	37.0	37.3	25.6	675
Absentee[a]				
Not aware	11.7	48.2	40.1	137
Aware[b]	29.9	45.7	24.4	512
TOTAL	26.0	46.2	27.7	649
Increase safety risks?				
Resident[a]				
Not aware[c]	35.0	35.0	30.0	60
Aware[b]	57.7	20.4	21.9	613
TOTAL	55.7	21.7	22.6	673
Absentee[a]				
Not aware[c]	15.9	39.9	44.2	138
Aware[b]	50.1	26.3	23.6	517
TOTAL	42.9	29.2	27.9	655
Increase bear-vehicle accidents?				
Resident[a]				
Not aware	20.7	36.2	43.1	58
Aware	43.3	31.7	25.0	605
TOTAL	41.3	32.1	26.5	663
Absentee[a]				
Not aware	21.3	40.4	38.2	136
Aware	42.8	28.7	28.5	505
TOTAL	38.2	31.2	30.6	641

a χ^2 test is significant between "not aware" vs. "aware" for the given residence group.

b χ^2 test is significant between residents vs. absentees who were aware of the presence of bears in the Catskills.

c χ^2 test is significant between residents vs. absentees who were not aware of the presence of bears in the Catskills.

Table 67. BEAR POPULATION TREND DESIRED BY PRIVATE LANDOWNERS, BY PERSONAL BEAR SIGHTINGS

Residence Status	Bear Population Trend Desired			Total N
	Increase	No Increase	Don't Know	
	Percent			
Resident[a]				
Sighted	73.1	13.3	13.6	316
Haven't sighted	54.0	18.6	27.4	463
TOTAL	61.7	16.4	21.8	779
Absentee[a]				
Sighted	72.3	11.4	16.3	184
Haven't sighted	49.8	17.2	33.0	536
TOTAL	55.6	15.7	28.8	720

[a] χ^2 test is significant between "sighted" vs. "haven't sighted" for the given residence group.

Table 68. PROXIMITY OF BEAR SIGHTINGS DESIRED BY PRIVATE LANDOWNERS, BY PERSONAL BEAR SIGHTINGS

Residence Status	Location of Bear Sightings Desired					Total N
	On Own Property	Near Own Property	On Nearby Undeveloped Land	In Remote Areas of Catskill Mts.	Never	
	Percent					
Resident[a]						
Sighted	53.0	8.8	17.7	14.8	5.7	317
Haven't sighted	34.0	5.8	18.9	26.5	14.8	465
TOTAL	41.7	7.0	18.4	21.7	11.1	782
Absentee[a]						
Sighted	54.9	7.1	15.4	17.0	5.5	182
Haven't sighted	31.7	5.8	18.2	28.6	15.8	539
TOTAL	37.6	6.1	17.5	25.7	13.2	721

[a] χ^2 test is significant between "sighted" vs. "haven't sighted" for given residence group.

Table 69. LEVEL OF NUISANCE ACTIVITY ACCEPTABLE TO PRIVATE LANDOWNERS, BY PERSONAL BEAR SIGHTINGS

Residence Status	Acceptable Annual Nuisance Activity: None	Annoyance, no $ loss	<$100 loss	$100-300 loss	>$300 loss	Total N
	Percent					
Resident[a]						
Sighted	12.3	44.7	32.7	4.9	5.5	309
Haven't sighted	28.4	41.0	22.5	4.5	3.6	444
TOTAL	21.8	42.5	26.7	4.6	4.4	753
Absentee[a]						
Sighted	10.6	45.3	34.6	7.3	2.2	179
Haven't sighted	23.8	41.7	27.7	4.2	2.6	530
TOTAL	20.5	42.6	29.5	4.9	2.5	709

[a] χ^2 test is significant between "sighted" vs. "haven't sighted" for given residence group.

Table 70. IMPORTANCE TO PRIVATE LANDOWNERS OF MAINTAINING A POPULATION OF BLACK BEARS IN THE CATSKILLS, BY PERSONAL BEAR SIGHTINGS

Residence Status	Importance Indicator: Protect Habitat With Land Use Regulations	Balance Bear-Human Land Needs	Only If No Conflict With Human Needs	Human Needs More Important Than Bears	Total N
	Percent				
Resident					
Sighted	36.4	41.2	17.9	4.5	313
Haven't sighted	30.7	40.5	22.5	6.2	449
TOTAL	33.1	40.8	20.6	5.5	762
Absentee					
Sighted	43.5	39.1	14.1	3.3	184
Haven't sighted	35.5	38.5	20.0	5.9	524
TOTAL	37.6	38.7	18.5	5.2	708

Respondents who had seen a bear had a greater tendency to give an opinion regarding bear behavior than did those who had not, with more of the former indicating either that bear are "timid and stay away from people and residences" or that they "occasionally approach residences but seldom cause damage." Considering only respondents who had an opinion, the greatest proportion chose these two most positive responses, regardless of whether they had ever seen a bear. These trends were consistent in each range for both resident and absentee landowners (Table 71; Tables E-19 and E-20).

Generally, resident and absentee landowners who had seen a bear were less likely than those who had not to believe that doubling the bear population would cause nuisance situations, safety risks, and bear-vehicle highway accidents to increase (Table 72). This trend was consistent in each range for both resident and absentee landowners, although the differences between those who had vs. those who had not seen a bear were not always significant (Tables E-21 and E-22).

Table 71. ATTITUDES OF PRIVATE LANDOWNERS TOWARD THE BEHAVIOR OF BLACK BEAR, BY PERSONAL BEAR SIGHTINGS

Residence Status	Attitude Toward Black Bear					Total N
	Timid	Seldom Damage	Often Damage	Menace	Not Familiar With Bears	
	Percent					
Resident[a]						
Sighted	44.3	34.6	1.3	2.5	17.3	318
Haven't sighted[b]	28.4	21.3	1.3	1.9	47.1	469
TOTAL	34.8	26.7	1.3	2.2	35.1	787
Absentee[a]						
Sighted	32.6	42.2	2.1	3.2	19.8	187
Haven't sighted[b]	20.3	19.3	2.0	1.3	57.1	548
TOTAL	23.4	25.2	2.0	1.8	47.6	735

a X^2 test is significant between "sighted" vs. "haven't sighted" for given residence group.

b X^2 test is significant between residents vs. absentees who had never sighted a bear in the Catskills.

Table 72. PRIVATE LANDOWNERS' ASSESSMENTS OF THE EFFECTS OF DOUBLING THE BLACK BEAR POPULATION, BY PERSONAL BEAR SIGHTINGS

Would doubling the bear population...	No	Yes	Don't Know	Total N
	Percent			
Increase nuisance?				
Resident[a]				
Sighted[b]	47.0	31.8	21.2	264
Haven't sighted[c]	30.5	40.7	28.9	410
TOTAL	36.9	37.2	25.8	674
Absentee[a]				
Sighted[b]	35.8	42.6	21.6	162
Haven't sighted[c]	22.8	47.2	30.0	487
TOTAL	26.0	46.1	27.9	649
Increase safety risks?				
Resident[a]				
Sighted	66.3	18.9	14.8	264
Haven't sighted[c]	48.9	23.5	27.6	409
TOTAL	55.7	21.7	22.6	673
Absentee[a]				
Sighted	56.6	24.1	19.3	166
Haven't sighted[c]	38.4	30.7	30.9	489
TOTAL	43.1	29.0	27.9	655
Increase bear-vehicle accidents?				
Resident[a]				
Sighted	51.4	29.3	19.3	259
Haven't sighted	34.7	34.0	31.3	403
TOTAL	41.2	32.2	26.6	662
Absentee[a]				
Sighted	49.7	25.2	25.2	163
Haven't sighted	34.5	33.1	32.4	478
TOTAL	38.4	31.0	30.6	641

[a] χ^2 test is significant between "sighted" vs. "haven't sighted" for the given residence group.

[b] χ^2 test is significant between residents vs. absentees who had sighted a bear.

[c] χ^2 test is significant between residents vs. absentees who had not sighted a bear.

Comparison of Respondents Who Have vs. Have Not Seen Bears on Their Own Property

Bear sightings on respondents' property were relatively uncommon, especially among absentee landowners. Consequently, only aggregate data will be reported for resident and absentee landowners.

Greater proportions of both resident and absentee landowners who saw a bear on their own property vs. those who had not wanted to continue to have sightings on their property (Table 73). People who had seen a bear on their own property also were more inclined than others to give an opinion regarding bear behavior; however, the greatest proportion of people who had an opinion, for both those with and without bear sightings on their property, regardless of residence status, believed bears are either timid or that they seldom cause damage (Table 74). Additionally, respondents who saw a bear on their own property did not differ significantly from those who had not in their tolerance of bear nuisance activity (Table 75) or in their interest in maintaining a population of black bears in the Catskills (Table 76).

Resident landowners who have vs. have not seen bear on their own property did not differ significantly in their opinions about the effects doubling the bear population would have on (1) the incidence of bear nuisance situations, (2) the safety of residents, or (3) the frequency of bear-vehicle highway accidents. Absentee landowners who have vs. have not seen bear on their own property did not differ significantly on their opinions regarding (1) and (3) above, but a significantly greater proportion of those who have seen a bear on their own property indicated that safety risks would not increase (Table 77).

Having sighted a bear on one's own property had little effect on resident or absentee landowners' generally positive attitude toward increasing the bear population (Table 78).

Table 73. PROXIMITY OF BEAR SIGHTINGS DESIRED BY PRIVATE LANDOWNERS, BY INCIDENCE OF SIGHTINGS ON PROPERTY

Residence Status / Sightings on Property	Proximity of Bear Sightings Desired: On Own Property	Near Own Property	On Nearby Undeveloped Land	In Remote Areas of Catskill Mts.	Never	Total N
	Percent					
Resident[a]						
No sightings on property	36.2	7.9	20.5	23.2	12.3	660
Sightings on property	72.4	1.7	7.8	12.9	5.2	116
TOTAL	41.6	7.0	18.6	21.6	11.2	776
Absentee[a]						
No sightings on property	34.6	6.4	18.1	27.3	13.6	653
Sightings on property	66.7	3.0	10.6	10.6	9.1	66
TOTAL	37.6	6.1	17.4	25.7	13.2	719

[a] χ^2 test is significant between "no sightings on property" vs. "sightings on property" for given residence group.

Table 74. ATTITUDES OF PRIVATE LANDOWNERS TOWARD BEAR BEHAVIOR, BY INCIDENCE OF SIGHTINGS ON PROPERTY

Residence Status / Sightings on Property	Attitude: Timid	Seldom Damage	Often Damage	Menace	Not Familiar With Bears	Total N
	Percent					
Resident[a]						
No sightings on property[b]	33.5	24.6	1.2	2.0	38.8	663
Sightings on property	41.5	38.1	1.7	3.4	15.3	118
TOTAL	34.7	26.6	1.3	2.2	35.2	781
Absentee[a]						
No sightings on property[b]	22.9	22.7	2.1	1.5	50.8	664
Sightings on property	27.5	47.8	1.4	4.3	18.8	69
TOTAL	23.3	25.1	2.0	1.8	47.7	733

[a] χ^2 test is significant between "no sightings on property" vs. "sightings on property" for given residence group.

[b] χ^2 test is significant between residents vs. absentees who did not have sightings on their property.

Table 75. LEVEL OF ANNUAL NUISANCE ACTIVITY ACCEPTABLE TO PRIVATE LANDOWNERS, BY SIGHTINGS ON OWN PROPERTY

Residence Status / Sightings on Property	Acceptable Annual Nuisance Activity					Total N
	None	Annoyance, no $ loss	< $100 loss	$100-300 loss	> $300 loss	
	Percent					
Resident						
No sightings on property	23.4	41.7	26.3	4.7	3.9	636
Sightings on property	13.5	46.8	28.8	3.6	7.2	111
TOTAL	22.0	42.4	26.6	4.6	4.4	747
Absentee						
No sightings on property	20.4	43.1	28.8	4.8	2.8	692
Sightings on property	20.0	36.9	36.9	6.2	0.0	65
TOTAL	20.4	42.6	29.6	5.0	2.5	707

Table 76. IMPORTANCE TO PRIVATE LANDOWNERS OF MAINTAINING A POPULATION OF BLACK BEARS IN THE CATSKILLS, BY SIGHTINGS ON OWN PROPERTY

Residence Status / Sightings on Property	Importance Indicator				Total N
	Protect Habitat Through Land Use Regulations	Balance of Human and Bear Needs	Only to Extent That It Doesn't Conflict With Human Land Use Needs	Human Land Use Needs Are More Important Than Bears	
	Percent				
Resident					
No sightings on property	33.1	40.8	20.5	5.6	640
Sightings on property	34.5	39.7	20.7	5.2	116
TOTAL	33.3	40.6	20.5	5.6	756
Absentee					
No sightings on property	38.9	37.9	18.2	5.0	638
Sightings on property	26.5	45.6	20.6	7.4	68
TOTAL	37.7	38.7	18.4	5.2	706

Table 77. PRIVATE LANDOWNERS' ASSESSMENTS OF THE EFFECTS OF DOUBLING THE BEAR POPULATION, BY SIGHTINGS ON OWN PROPERTY

Would doubling the bear population...	No	Yes	Don't Know	Total N
	Percent			
Increase nuisance?				
Resident				
No sightings on property[a]	35.9	37.8	26.3	579
Sightings on property	43.3	33.3	23.3	90
TOTAL	36.9	37.2	25.4	669
Absentee				
No sightings on property[a]	25.5	46.5	28.9	589
Sightings on property	32.2	40.7	27.1	59
TOTAL	26.1	46.0	27.9	648
Increase safety risks?				
Resident				
No sightings on property[a]	55.6	21.3	23.1	581
Sightings on property	55.7	25.0	19.3	88
TOTAL	55.6	21.8	22.6	669
Absentee[b]				
No sightings on property[a]	41.6	29.1	29.3	591
Sightings on property	57.1	27.0	15.9	63
TOTAL	43.1	28.9	28.0	654
Increase bear-vehicle highway accidents?				
Resident				
No sightings on property	40.1	32.4	27.5	568
Sightings on property	48.3	30.3	21.3	89
TOTAL	41.2	32.1	26.6	657
Absentee				
No sightings on property	37.7	32.3	30.1	579
Sightings on property	44.3	19.7	36.1	61
TOTAL	38.3	31.1	30.6	640

[a] χ^2 test is significant between residents vs. absentees who did not have sightings on their own property.

[b] χ^2 test is significant between "no sightings on property" vs. "sightings on property" for given residence group.

Table 78. BEAR POPULATION TRENDS DESIRED BY PRIVATE LANDOWNERS, BY SIGHTINGS ON OWN PROPERTY

Residence Status / Sightings on Property	Bear Population Trend Desired			Total N
	Increase	No Increase	Don't Know	
	Percent			
Resident				
No sightings on property[a]	60.2	16.6	23.2	656
Sightings on property	70.1	15.4	14.5	117
TOTAL	61.7	16.4	21.9	773
Absentee				
No sightings on property[a]	54.8	16.0	29.2	650
Sightings on property	63.2	11.8	25.0	68
TOTAL	55.6	15.6	28.8	718

[a] χ^2 test is significant between residents vs. absentees who did not have sightings on own property.

Comparison of Landowners Who Were Hunters vs. Nonhunters

Greater proportions of resident than absentee landowners reported bear sightings, regardless of hunting status, and bear sightings were reported by significantly greater ($p \geq .95$) proportions of hunters than nonhunters for both resident (54 vs. 30 percent) and absentee (43 vs. 16 percent) landowners (Table 79). Along with hunters' increased contact with bears came a greater willingness to express an attitude about bear behavior, with greater proportions of hunters than nonhunters indicating bears are either timid or seldom cause damage. It should be noted, however, that for resident and absentee landowners who expressed an opinion, hunting status mattered little, with most believing bears are timid or seldom cause damage (Table 80).

Table 79. INCIDENCE OF BEAR SIGHTINGS BY PRIVATE LANDOWNERS, BY HUNTING STATUS

Residence Status / Hunting Status	Percent Who Saw A Bear	Percent Who Did Not See A Bear	Total N
Resident[a]			
Nonhunter[b]	29.6	70.4	422
Hunter[c]	53.5	45.5	316
TOTAL	40.6	59.4	783
Absentee[a]			
Nonhunter[b]	16.2	83.8	476
Hunter[c]	42.8	57.2	250
TOTAL	25.3	74.7	726

[a] χ^2 test is significant between "nonhunter" vs. "hunter" for given residence group.

[b] χ^2 test is significant between residents vs. absentees who were nonhunters.

[c] χ^2 test is significant between residents vs. absentees who were hunters.

Table 80. ATTITUDES OF PRIVATE LANDOWNERS TOWARD BEAR BEHAVIOR, BY HUNTING STATUS

Residence Status / Hunting Status	Attitude					Total N
	Timid	Seldom Damage	Often Damage	Menace	Not Familiar With Bears	
	Percent					
Resident[a]						
Nonhunter[b]	25.0	23.1	1.2	2.9	47.9	420
Hunter[c]	46.5	30.8	1.4	1.4	19.9	357
TOTAL	34.9	26.6	1.3	2.2	35.0	777
Absentee[a]						
Nonhunter[b]	19.0	21.5	2.3	1.3	55.9	469
Hunter[c]	31.5	32.7	1.6	2.4	31.9	251
TOTAL	23.3	25.4	2.1	1.7	47.5	720

[a] χ^2 test is significant between "nonhunter" vs. "hunter" for given residence group.

[b] χ^2 test is significant between residents vs. absentees who were nonhunters.

[c] χ^2 test is significant between residents vs. absentees who were hunters.

Hunters were somewhat more tolerant of bear nuisance activity, but losses of $100 or more due to black bear were considered acceptable by few landowners, regardless of hunting status (Table 81).

Table 81. LEVEL OF ANNUAL NUISANCE ACTIVITY ACCEPTABLE TO PRIVATE LANDOWNERS, BY HUNTING STATUS

Residence Status / Hunting Status	Acceptable Annual Nuisance Activity: None	Annoyance, no $ loss	<$100 loss	$100-300 loss	>$300 loss	Total N
	Percent					
Resident[a]						
Nonhunter	29.4	41.0	22.9	3.7	3.0	402
Hunter	13.2	44.2	31.0	5.6	6.1	342
TOTAL	21.9	42.5	26.6	4.6	4.4	744
Absentee[a]						
Nonhunter	26.2	40.0	27.3	4.4	2.0	450
Hunter	9.8	46.7	34.4	5.7	3.3	244
TOTAL	20.5	42.4	29.8	4.9	2.4	694

[a] χ^2 test is significant between "nonhunter" vs. "hunter" for given residence group.

The vast majority of both hunters and nonhunters among resident and absentee landowners placed some degree of importance on maintaining a population of black bears as part of the ecology of the Catskill Region. While differences were found in responses of hunters vs. nonhunters among both resident and absentee landowners, probably the most important observation is that at least 70 percent of the respondents, regardless of hunting or residence status, were encompassed by the two response categories most favorable toward maintaining a bear population (Table 82).

The most striking difference found between hunters and nonhunters was that significantly more hunters, among both resident and absentee landowners, wanted the bear population to increase (Table 83).

Table 82. IMPORTANCE TO PRIVATE LANDOWNERS OF MAINTAINING A POPULATION OF BLACK BEARS IN THE CATSKILLS, BY HUNTING STATUS

Residence Status / Hunting Status	Importance Indicator: Protect Habitat Through Land Use Regulations	Balance of Human and Bear Needs	Only to Extent That It Doesn't Conflict With Human Land Use Needs	Human Land Use Needs Are More Important Than Bears	Total N
	Percent				
Resident[a]					
Nonhunter	32.8	37.7	21.1	8.3	408
Hunter	33.6	44.1	20.1	2.3	354
TOTAL	33.2	40.7	20.6	5.5	762
Absentee[a]					
Nonhunter	35.4	36.9	20.6	7.2	461
Hunter	42.0	42.4	13.9	1.6	245
TOTAL	37.7	38.8	18.3	5.2	706

[a] χ^2 test is significant between "nonhunter" vs. "hunter" for given residence group.

Table 83. BEAR POPULATION TREND DESIRED BY PRIVATE LANDOWNERS, BY HUNTING STATUS

Residence Status / Hunting Status	Bear Population Trend Desired: Increase	No Increase	Don't Know	Total N
	Percent			
Resident[a]				
Nonhunter	47.9	21.7	30.5	420
Hunter	78.3	9.7	12.0	359
TOTAL	61.9	16.2	22.0	779
Absentee[a]				
Nonhunter	42.3	20.5	37.2	468
Hunter	80.9	6.4	12.7	251
TOTAL	55.8	15.6	28.7	719

[a] χ^2 test is significant between "nonhunter" vs. "hunter" for given residence group.

Overview of Respondents Who Had Problems with Black Bears[7]

Fifty percent (12) of the respondents who had problems wanted the black bear population to increase, while 38 percent (9) did not; the remaining 12 percent (3) were not sure (one respondent who experienced a problem did not answer this question). Of the 20 respondents who reported problems and stated an opinion regarding bears' behavior, three-quarters indicated that bears are timid or seldom cause damage; the remaining 5 respondents either thought bears often cause damage or are a menace.

A plurality (40 percent) of the 25 respondents who had experienced problems from bears wanted to be able to see bears on their own property. Most of the others (28 percent) wanted to have personal sightings restricted to remote areas of the Catskill Mountains; only 8 percent never wanted to see a bear.

About one-quarter (24 percent) of those who had problems indicated that they would not find any level of bear nuisance activity acceptable; 40 percent would tolerate occasional nuisance activity; and 36 percent would tolerate some economic loss. Most people who experienced problems from bears still believed that it was important to maintain a population of black bears in the Catskills. This positive attitude prevailed despite the fact that the majority (59 percent) believed that a doubling of the bear population would increase nuisance activity by black bear.

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[7] Since only 25 respondents (2 percent) reported problems from black bear, data will not be given on a range-by-range basis.

DISCUSSION AND IMPLICATIONS

The preceding analyses indicate that currently all three survey audiences have a moderate to high degree of tolerance for black bears. But more importantly, their responses generally reveal an atmosphere of acceptance for a bear population larger than that extant prior to DEC's effort to increase the population. This observation is supported by (1) the generally positive attitudes regarding bear behavior, for those offering an opinion; (2) the acceptability of at least occasional bear nuisance activity; (3) the varying, but generally positive, responses regarding maintenance of black bears in the Catskills; (4) the endorsement by the majority of private landowners and the plurality of both corporate representatives and camp managers for an increase in the Catskill black bear population.

The data also reveal some potential for problems. First, although many people expressed acceptability of nuisance and some economic damage from black bear, all but a few have never actually experienced problems. We cannot predict how their attitudes might be affected by first-hand experience with bear nuisance situations. Additionally, some of those who did report damage in the past gave estimates of $100 or more. A means to alleviate this financial burden may be useful in maintaining the acceptability of black bears.

Two findings imply that considerable potential exists to increase public acceptance of black bears. First, a plurality of respondents indicated they had no opinion of black bear behavior since they were not familiar with bear, thus suggesting that DEC should continue, if not increase, its public education efforts regarding black bear. The opportunity to influence favorably these people without opinions seems encouraging for the black bear management program. Second, more favorable attitudes about black bear pervaded among those respondents who had personally seen a bear, which may indicate that increased contact will further enhance acceptability.

All the foregoing points should be considered in the light of one reality: since few respondents actually saw bear in the Catskills, and even fewer had any problems from them, a doubling of the bear population may have little impact in the currently defined occupied ranges. The population change in the unoccupied or peripheral ranges may be more noticeable.

Another public attitude survey should be conducted once landowners have had experience (potentially) with a larger bear population to determine if the generally positive attitudes identified in this study persist and to determine the degree to which the incidence of bear nuisance increases. Because of the relative homogeneity of responses across all three survey audiences, it may not be necessary to resurvey more than one audience (e.g. private landowners) to evaluate the impact of a larger bear population.

APPENDIX A:

COUNTIES AND TOWNS IN STUDY AREA

A-1. COUNTIES AND TOWNS IN STUDY AREA, BY BEAR RANGE

Northern Occupied

Delaware
- Colchester
- Middletown
- Roxbury
- Stamford
- Tompkins

Greene
- Ashland
- Cairo
- Durham
- Greenville
- Halcott
- Hunter
- Jewett
- Lexington
- Prattsville
- Windham

Sullivan
- Neversink

Ulster
- Denning
- Hardenberg
- Kingston
- Olive
- Rochester
- Saugerties
- Shandaken
- Ulster
- Wawarsing
- Woodstock

Northern Unoccupied

Albany
- Berne
- Bethlehem
- Coeymans
- Colonie
- Green Island
- Guilderland
- Knox
- New Scotland
- Rennselaerville
- Westerlo

Delaware
- Andes
- Bovina
- Davenport
- Delhi
- Deposit
- Franklin
- Hamden
- Harpersfield
- Kortright
- Masonville
- Meredith
- Sidney
- Walton

Greene
- Athens
- Catskill
- Coxsackie
- New Baltimore

Orange
- Blooming Grove
- Cornwall
- Crawford
- Hamptonburgh
- Highlands
- Montgomery
- Newburgh
- New Windsor
- Woodbury

Otsego
- Burlington
- Butternuts
- Cherry Valley
- Decatur
- Edmeston
- Exeter
- Hartwick
- Laurens
- Maryland
- Middlefield
- Milford
- Morris
- New Lisbon
- Oneonta
- Otego
- Otsego
- Pittsfield
- Plainfield
- Richfield
- Roseboom
- Springfield
- Unadilla
- Westford
- Worcester

Schoharie
- Blenheim
- Broome
- Carlisle
- Cobleskill
- Conesville
- Esperance
- Fulton
- Gilboa
- Jefferson
- Middleburg
- Richmondville
- Schoharie
- Seward
- Sharon
- Summit
- Wright

Sullivan
- Rockland

Ulster
- Esopus
- Gardiner
- Hurley
- Lloyd
- Marbletown
- Marlborough
- New Paltz
- Plattekill
- Rosendale
- Shawangunk

Southern Occupied

Delaware
- Hancock

Orange
- Deerpark
- Greenville

Sullivan
- Bethel
- Cochecton
- Delaware
- Fallsburgh
- Forestburg
- Highland
- Liberty
- Lumberland
- Mamakating
- Thompson
- Tusten

Southern Unoccupied

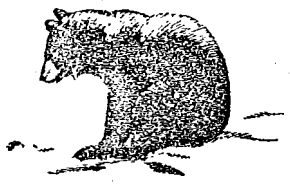
Orange
- Chester
- Goshen
- Minisink
- Monroe
- Mount Hope
- Tuxedo
- Wallkill
- Warwick
- Wawayanda

Sullivan
- Callicoon
- Fremont

APPENDIX B:

SURVEY QUESTIONNAIRES AND COVER LETTERS

CATSKILL BLACK BEAR SURVEY



CATSKILL BLACK BEAR SURVEY

Conducted by the
Department of Natural Resources
in the State College of
Agriculture and Life Sciences
Cornell University

This study concerns the management of the black bear population in the Catskill Region. Managers of commercial campgrounds and directors of organizational camps in Otsego, Schoharie, Albany, Greene, Ulster, Delaware, Sullivan and Orange Counties are being surveyed to determine their feelings about black bear.

Would the camp director or campground manager please complete this survey at your earliest convenience, seal it (postage has been provided), and drop it in the nearest mailbox. Your responses will remain confidential and will never be associated with your name or the name of your camp or campground.

THANK YOU FOR YOUR COOPERATION.

CATSKILL BLACK BEAR SURVEY

Department of Natural Resources

Cornell University

1) Do you feel that most of your campers are aware of the presence of black bears in the Catskill Region?

___ YES ___ NO ___ DON'T KNOW

2) Have you ever seen a black bear in the Catskills?

___ NO

___ YES, in 1977 (How many times? ___)

___ YES, in 1976 (How many times? ___)

___ YES, prior to 1976

If you answered "YES" to any of the above, were any of your sightings on your camp property?

___ NO

___ YES, in 1977 (How many times? ___)

___ YES, in 1976 (How many times? ___)

___ YES, prior to 1976

3) On approximately how many occasions did your campers report seeing a black bear at your camp in 1977?

_____ Number of times

4) What trend have you seen in black bear populations in the area of the Catskills where your camp is located for the two time periods below?

a) Trend from 1970 to the present?

___ number of bears increased

___ number of bears remained about the same

___ number of bears decreased

___ don't know

b) Trend from 1960 to 1970?

___ number of bears increased

___ number of bears remained about the same

___ number of bears decreased

___ don't know

5) What do you feel has the greatest influence on increases or decreases in black bear populations? (Please check one.)

___ amount of forest land

___ availability of food

___ human recreational use of forest land

___ hunting

___ bear-vehicle highway accidents

___ other (specify):

_____

_____

6) Which of the following statements most closely agrees with your current feelings about black bears in the Catskills and surrounding region? (Please check only one response.)

___ Black bears are timid and stay away from campers and other people.

___ Black bears occasionally approach camps, but seldom cause damage.

___ Black bears frequently approach camps, and often cause damage.

___ Black bears are unpredictable and are a menace.

___ Not familiar enough with black bears to give an opinion.

7) To what degree would you like your campers to experience black bears in the Catskill Region? (Please check only one response.)

___ I would like campers to occasionally see a bear at my camp.

___ I would like campers to occasionally see a bear near my camp, but not right at the camp.

___ I would like campers to occasionally see a bear on outings to nearby undeveloped lands, but not around my camp.

___ I would only like campers to see a bear in remote areas of the Catskill Mountains.

___ I have no interest in my campers ever seeing a bear in the wild.

8) Have black bears ever caused your camp any problems?

___ NO ___ YES

If "YES," please indicate the year(s), type of problem(s), and estimate the damage costs, if any.

Year(s)	Problem(s) (Please specify)	Cost($)
_____	_____	_____
_____	_____	_____

If "YES," did you report this problem to the Department of Environmental Conservation?

___ NO ___ YES

If "YES," were you satisfied with the Department's assistance?

___ NO ___ YES

9) What level of annual nuisance activity would you tolerate from black bears in the Catskill Region?

___ None

___ An occasional annoyance, but no economic loss.

___ An occasional annoyance, with minor (less than $100) economic loss.

___ Occasional to frequent annoyance, with $100 to $300 economic loss.

___ Occasional to frequent annoyance, with greater than $300 economic loss.

10) If the black bear population in the Catskill Region were doubled (from about 300 to about 600), do you feel that they would: (Please answer each question by checking [X] the appropriate response.)

	YES	NO	DON'T KNOW
a) cause an increased opportunity for desirable observations of bears by your campers?	____	____	____
b) cause an increased interest among your campers in recreational hunting of bears?	____	____	____
c) cause an increased occurrence of nuisance situations with your campers?	____	____	____
d) cause increased personal safety risks among your campers?	____	____	____
e) cause an increase in vehicle-bear highway accidents?	____	____	____
f) cause an increase in your clientele?	____	____	____
g) cause a decrease in your clientele?	____	____	____
h) have little or no perceivable difference on bear-human interaction?	____	____	____

11) Do you feel it is important to maintain a population of black bears in the Catskills?

___ Yes, even to the point that land use regulations are employed throughout the Catskills to protect bear habitat.

___ Yes, but through a realistic balance of human land use needs and bear habitat requirements.

___ Yes, but only to the extent that considerations for bear do not conflict with human land needs.

___ No, because human land use needs for bear habitat are more important than bears.

12) Would you want the Catskill black bear population to increase, realizing there are both potential costs (bear nuisances) and benefits (bear sightings) associated with a larger bear population?

___ Yes, I want the bear population to increase.

___ No, I don't want the bear population to increase.

___ Don't know.

13) Do you hunt?

___ NO ___ YES

14) Do you think that black bear hunting is necessary as a control to insure that bear numbers are compatible with human land uses and available bear habitat?

___ YES ___ NO ___ DON'T KNOW

15) What were the opening and closing dates for your camp in 1977?

Opening _____

Closing _____

16) Which of the following best describes the objectives of your camp?

___ Recreational/social

___ Religious

___ Environmental education

___ Arts/Crafts

___ Physical education

___ Other (Please specify):

_____

17) During the peak portion of your season, the total number of individuals in your camp at any given time would most likely be (Check one):

___ less than 50

___ 50-99

___ 100-199

___ 200-299

___ 300-499

___ 500 or more

18) The primary age group(s) served by your camp is:

___ families of all ages

___ children under 10

___ children 10 to 12

___ teens 13-15

___ teens 16-18

___ adults

19) Which of the following best describes the area in which your camp is located?

___ Rural (outside of a village)

Is the rural area primarily:

agricultural ___

forested ___

___ Village of under 1000 population

___ Village of 1000 to 4999

___ City of 5000 or more

Please use this space for any additional comments you wish to make:

THANK YOU FOR YOUR COOPERATION!

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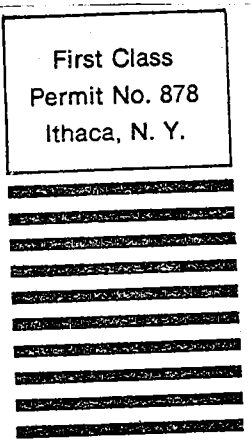
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Department of Natural Resources
Fernow Hall, Ithaca, N. Y. 14853

Fishery Science
Forest Science
Wildlife Science
Natural Resources
Outdoor Recreation
Environmental Conservation

April 13, 1978

Dear Camp Owner or Director:

The New York State Department of Environmental Conservation is evaluating the black bear population level in and around the Catskill Region. As part of this evaluation, the Department of Natural Resources at Cornell University has been asked to obtain input from managers of commercial campgrounds and directors of organizational camps in the Catskills.

A short questionnaire (enclosed) has been prepared to obtain information regarding your general attitude toward black bear in the Catskills and any problems your facility has experienced from black bears. If your campground or camp has had no incidents involving black bears, or if black bears are of no immediate concern, we still need this information, and allowances have been made for these types of responses on the questionnaire.

Please note that your responses are very important if the study is to obtain valid and accurate information. Your name or the name of your camp or campground will not be associated with the information you provide. To return the questionnaire, simply seal it and drop it in a mailbox. Postage has been provided.

Following the completion of the study, we will be sending respondents a summary of the results and some informative materials from the Department of Environmental Conservation about the Catskill black bear population and the Department's black bear research activities in the Catskill Region.

Thank you for your cooperation and completed questionnaire.

Sincerely yours,

Daniel J. Decker

Daniel J. Decker
Research Support Specialist
Natural Resources

dm
Enclosure

New York State College of Agriculture and Life Sciences
a Statutory College of the State University
Cornell University

Department of Natural Resources
Fernow Hall, Ithaca, N. Y. 14853

Fishery Science
Forest Science
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Environmental Conservation

April 21, 1978

Dear Camp Owner or Director:

About 8 days ago we sent you a questionnaire concerning black bears in the Catskill Region. If you have already returned the questionnaire, please disregard this reminder. In case you have not yet found the time to complete the questionnaire, may I ask you to take a few minutes now to fill it out.

Your answers, in addition to those of other camp owners and directors surveyed, will help us provide the Department of Environmental Conservation with important information for the black bear management program in the Catskills. For this public input to be accurate, we need your response. Please understand that it makes no difference whether or not you have personally ever seen a black bear.

All of the information which you provide will be kept confidential, and will not be associated with your name. Following the completion of the study, we will be sending respondents a summary of the results and some informative materials from the Department of Environmental Conservation about the Catskill black bear population and the Department's black bear research activities in the Catskill Region.

Thank you for your time and effort.

Sincerely yours,

Daniel J. Decker

Daniel J. Decker
Research Support Specialist
Natural Resources

dm

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Cornell University

Department of Natural Resources
Fernow Hall, Ithaca, N. Y. 14853

Fishery Science
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Environmental Conservation

May 11, 1978

Dear Camp Owner or Director:

Several weeks ago we sent you a questionnaire asking you to help us in an evaluation of public attitudes and interests toward black bears and their management in and around the Catskill Region (Orange, Ulster, Greene, Sullivan, Delaware, Schoharie, Otsego and Albany Counties). By the time you receive this reminder, you may have already completed and returned the questionnaire. However, if you have not yet completed the questionnaire I would like to urge you to take a few minutes now to fill it out. In case you may have misplaced the first copy, a second questionnaire is enclosed.

Your reply is important if the survey results are to accurately represent the collective attitudes and interests of camp owners and directors toward black bear in the Catskills. This will help insure that the management of black bears in the region will be in your best interest.

Again, all information you provide is kept confidential; it is computer processed and never associated with your name.

Following completion of the study, we will be sending respondents a summary of the results and some informative materials from the Department of Environmental Conservation about the Catskill black bear population and the Department's black bear research activities in the Catskill Region.

Thank you for your help.

Sincerely yours,

Daniel J. Decker

Daniel J. Decker
Research Support Specialist
Natural Resources

DJD:k
enclosure

New York State College of Agriculture and Life Sciences
a Statutory College of the State University
Cornell University

Department of Natural Resources
Fernow Hall, Ithaca, N. Y. 14853

Fishery Science
Forest Science
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Environmental Conservation

May 19, 1978

Dear Camp Owner or Director:

We still haven't received your questionnaire concerning black bears in and around the Catskill Region (Albany, Schoharie, Otsego, Delaware, Sullivan, Orange, Ulster and Greene Counties). It is important that we receive your reply so that the information we obtain will accurately reflect the collective attitudes and interests of all camp owners and directors in the Catskill Region.

Your answers will remain confidential and will not be associated with your name.

Thank you for your cooperation.

Sincerely yours,

Daniel J. Decker

Daniel J. Decker
Research Support Specialist
Natural Resources

INTERVIEW INTRODUCTION - CAMPGROUND MANAGERS

Hello,

May I speak with _____? My name is _____ and I work for the Department of Natural Resources at Cornell University. We are conducting a survey of campground (camp) managers in the general Catskill area, to determine their attitudes towards black bear and any experiences they may have had with black bear. This survey will provide the Department of Environmental Conservation with public input for their bear management program. You have been randomly chosen to participate in this study. I would appreciate a few minutes of your time to ask you a few brief questions?

BLACK BEAR CAMP AND CAMPGROUND TELEPHONE FOLLOW-UP OF NONRESPONDENTS IN THE SOUTHERN UNOCCUPIED RANGED

Interviewer's name _____ Phone # called _____

Date and Time _____ Questionnaire # _____ Interview # _____

1. Objective or type of camp?

recreational/social _____ arts/crafts _____

religious _____ physical ed. _____

environmental ed. _____ other (specify):

_____

2. Have you ever seen a black bear in the Catskills?

_____ NO

_____ YES:

	Number of Times	Any sightings on camp property?
in 1977	_____	_____
in 1976	_____	_____
prior to 1976	_____	_____

3. On approximately how many occasions did your campers report seeing a black bear at your camp in 1977?

_____ times

4. Have black bears ever caused your camp any problems?

_____ NO

_____ YES

If YES, when did it occur, what type of problem was it, and if damage occurred, about how much did it cost?

Year	Problem	Cost
_____	_____	_____
_____	_____	_____

5. Would you want the Catskill black bear population to increase, realizing there are both potential costs (bear nuisances)and benefits (bear sightings) associated with a larger population?

_____ YES

_____ NO

_____ DON'T KNOW

WRITE ADDITIONAL COMMENTS ON BACK.

CATSKILL BLACK BEAR SURVEY

CATSKILL BLACK BEAR SURVEY

Conducted by the
Department of Natural Resources
in the State College of
Agriculture and Life Sciences
Cornell University

This survey concerns the management of the black bear population in the Catskill Region. Businesses and organizations owning land in Otsego, Schoharie, Albany, Greene, Ulster, Delaware, Sullivan or Orange Counties are being surveyed to determine how they are affected by black bear, and their recommendations for black bear management. The study is being conducted in cooperation with the New York State Department of Environmental Conservation, which is seeking public input for its black bear management program in the Catskill Region.

The chief officer of the organization (or his/her designate) or the manager of the business should complete this brief questionnaire, answering questions or reacting to statements as a representative of the organization or business and its interests. The questions should be answered in reference to your property in the Town of _____, _____ County.

The information you provide will not be associated with your name or the name of your organization or business.

THANK YOU FOR YOUR COOPERATION.

CATSKILL BLACK BEAR SURVEY

Department of Natural Resources
Cornell University

1) Were you aware that there are black bears in the Catskill Region?

_____ YES _____ NO _____ DON'T KNOW

2) Have there been any black bear sightings on your business' or organization's property in the Catskills?

_____ NO

_____ YES, in 1977 (How many times? _____)

_____ YES, in 1976 (How many times? _____)

_____ YES, prior to 1976

_____ DON'T KNOW

3) What has been the trend in black bear populations in the area of the Catskills where your business' or organization's property is located for the two time periods below?

a) Trend from 1970 to the present?

___ number of bears increased

___ number of bears remained about the same

___ number of bears decreased

___ don't know

b) Trend from 1960 to 1970?

___ number of bears increased

___ number of bears remained about the same

___ number of bears decreased

___ don't know

4) Which of the following statements most closely agrees with your current feelings about black bears in the Catskills and surrounding region? (Please check only one response.)

___ Black bears are timid and stay away from our property.

___ Black bears occasionally approach our property, but seldom cause damage.

___ Black bears frequently approach our property, and often cause damage.

___ Black bears are unpredictable and are a menace.

___ Not familiar enough with black bears to give an opinion.

5) To what degree would your business or organization like black bears in the Catskill Region? (Please check only one response.)

___ We would not mind occasionally having a bear on our business' or organization's property.

___ We would not mind occasionally having bears near our business' or organization's property, but not right on the property.

___ We would like to have bears on nearby undeveloped lands, but not around our business' or organization's property.

___ We would only like to have bears in remote areas of the Catskill Mountains.

6) Have black bears ever caused your business or organization any problems?

_____ NO _____ YES

If "YES," please indicate the year(s), type of problem(s), and estimate the damage costs, if any.

Year(s)	Problem(s)(Please Specify)	Cost($)
_____	_____	_____
_____	_____	_____

If "YES," did you report this problem to the Department of Environmental Conservation?

_____ NO _____ YES

If "YES," were you satisfied with the Department's assistance?

_____ NO _____ YES

7) What level of annual nuisance activity would your business or organization tolerate from black bears in the Catskill Region?

___ None

___ An occasional annoyance, but no economic loss.

___ An occasional annoyance, with minor (less than $100) economic loss.

___ Occasional to frequent annoyance, with $100 to $300 economic loss.

___ Occasional to frequent annoyance, with greater than $300 economic loss.

8) If the black bear population in the Catskill Region were doubled (from about 300 to about 600), do you feel that it would: (Please answer each question by checking [x] the appropriate response.)

	YES	NO	DON'T KNOW
a) cause an increased opportunity for desirable observations of bears?	___	___	___
b) cause an increased interest in recreational hunting of bears?	___	___	___
c) cause an increased occurrence of bear nuisance situations on your business' or organization's property?	___	___	___
d) cause increased personal safety risks among people in the Catskills?	___	___	___
e) cause an increase in vehicle-bear highway accidents?	___	___	___
f) cause an increase in your business or property value?	___	___	___
g) cause a decrease in your business or property value?	___	___	___
h) have little or no perceivable difference in bear-human interaction?	___	___	___

9) Does your business or organization feel it is important to maintain a population of black bears in the Catskills?

___ Yes, even to the point that land use regulations are employed throughout the Catskills to protect bear habitat.

___ Yes, but through a realistic balance of human land use needs and bear habitat requirements.

___ Yes, but only to the extent that considerations for bears do not conflict with human land use needs.

___ No, because human land use needs for bear habitat are more important than bears.

10) Would your business or organization want the Catskill black bear population to increase, realizing there are both potential costs (bear nuisances) and benefits (bear sightings) associated with a larger bear population?

___ Yes, we want the bear population to increase.

___ No, we don't want the bear population to increase.

___ Don't know.

11) Does your business or organization allow people to hunt black bear on its property during designated hunting seasons?

_____ YES _____ NO _____ DON'T KNOW

12) Do you think that black bear hunting is necessary as a control to insure that bear numbers are compatible with human land uses and available bear habitat?

_____ YES _____ NO _____ DON'T KNOW

13) What do you feel has the greatest influence on increases or decreases in black bear populations? (Please check one.)

_____ amount of forest land

_____ availability of food

_____ human recreational use of forest land

_____ hunting

_____ bear-vehicle highway accidents

_____ other(specify):

_____

_____ don't know

14) In reference to your land in the Town designated on the first page of this questionnaire, which of the following best describes the area in which that land is located?

_____ agricultural

_____ forested

_____ other (Please specify):

_____

The following information is needed to help us identify the characteristics of organizations and businesses which share common concerns or interests. With this information, efforts can be better directed to help the Department of Environmental Conservation serve you.

The following information will be kept confidential, and will not be associated with your name or the name of your organization or business.

15) Please check below the item that most closely corresponds with your position in the organization or business?

___ owner

___ general manager

___ executive officer

___ accountant

___ public relations officer

___ other (Please specify):

_____

16) How many years has your business or organization owned property in the Catskills? _____

17) What is the nature of your business or organization? (Please specify):

_____

18) How many people employed by your business or organization work in the Catskill Region? (Please give number.) _____

Please use this space for any additional comments you wish to make:

THANK YOU FOR YOUR COOPERATION!

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Fernow Hall, Ithaca, N. Y. 14853

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Environmental Conservation

May 23, 1978

Dear Sir or Madam:

The New York State Department of Environmental Conservation is evaluating the black bear population level in and around the Catskill Region (Albany, Delaware, Greene, Orange, Otsego, Schoharie, Sullivan and Ulster Counties). As part of this evaluation, Cornell University has been asked to obtain input from businesses and organizations which own land in the eight county region, and therefore might be affected by black bears. Your business or organization (as on the address label of the envelope) is being requested to participate in this evaluation.

A brief questionnaire (enclosed) has been prepared to obtain information regarding your business' or organization's general attitude toward black bears, nuisance or damage problems your corporation has experienced from black bears, and the trend in future black bear populations that your business or organization would like to see in the Catskills. If your business or organization has had no contact with black bears, or if black bears are of no immediate concern, we still need this information; allowances have been made for these types of responses on the questionnaire.

We would like the chief officer of the business or organization to complete the questionnaire, answering questions or reacting to statements as a representative of the business or organization and its interests. If you don't feel you are best qualified to answer the questions, please forward this letter and the questionnaire to the appropriate person.

Please understand that your response is very important to obtain accurate data since your business or organization has been selected as part of a random sample which will be representative of all businesses or organizations in the Region. Therefore, if we do not receive the completed questionnaire within a short period of time, a follow-up letter will be sent to the address on the envelope which contained this letter. These are meant to remind recipients about the questionnaire, since we have found that often people want to participate, but do not return their questionnaires because they forgot about them or misplaced them.

The name of your business or organization will not be associated with the data you provide. To return the questionnaire, simply seal it and drop it in any mailbox. Postage has been provided.

Thank you for your cooperation and completed questionnaire.

Sincerely yours,

Daniel J. Decker

Daniel J. Decker
Research Support Specialist
Natural Resources

dm

New York State College of Agriculture and Life Sciences
a Statutory College of the State University
Cornell University

Department of Natural Resources
Fernow Hall, Ithaca, N. Y. 14853

Fishery Science
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Environmental Conservation

May 24, 1978

Dear Sir or Madam:

Yesterday we sent you a questionnaire concerning black bears in and around the Catskill Region (Albany, Delaware, Greene, Orange, Otsego, Schoharie, Sullivan and Ulster Counties). On the inside front cover of the questionnaire was a reference to the location of your business' or organization's property. On some questionnaires this information was inadvertently omitted. Please complete your questionnaire in reference to your business' or organization's property in the Town of _____, _____ County.

I hope this oversight has not caused you any inconvenience. Thank you for your continued cooperation.

Sincerely yours,

Daniel J. Decker

Daniel J. Decker
Research Support Specialist
Natural Resources

dm

New York State College of Agriculture and Life Sciences
a Statutory College of the State University
Cornell University

Department of Natural Resources
Fernow Hall, Ithaca, N. Y. 14853

Fishery Science
Forest Science
Wildlife Science
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Outdoor Recreation
Environmental Conservation

June 2, 1978

Dear Sir or Madam:

About 10 days ago we sent you a questionnaire concerning your business' or organization's interests and concerns regarding black bears in the general eight county Catskill Region of New York. A sample of businesses or organizations owning land in Albany, Delaware, Greene, Orange, Otsego, Schoharie, Sullivan and Ulster Counties was contacted. If you have already returned the questionnaire, please disregard this reminder and accept our "thanks" for your cooperation. In case you have not yet found the time to complete the questionnaire, may I ask you to take a few minutes now to fill it out.

Your response, in addition to that of other businesses and organizations surveyed, will help us provide the Department of Environmental Conservation with important information for their black bear management program in and around the Catskills. For this input to accurately reflect the interests and concerns of businesses and organizations owning land in the area, we need your response.

All of the information will be kept confidential, and will not be associated with the name of your business or organization; only group statistics are used in any reports. Following the completion of the study, we will be sending cooperators a summary of the results and some informative materials from the Department of Environmental Conservation about the Catskill black bear population and the Department's black bear research in the Catskill Region.

Thank you for your time and effort.

Sincerely yours,

Daniel J. Decker

Daniel J. Decker
Research Support Specialist
Natural Resources

dm

New York State College of Agriculture and Life Sciences
a Statutory College of the State University
Cornell University

Department of Natural Resources
Fernow Hall, Ithaca, N. Y. 14853

Fishery Science
Forest Science
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Environmental Conservation

June 15, 1978

Dear Sir or Madam:

Several weeks ago we sent you a questionnaire asking you to help us in an evaluation of public attitudes and interests toward black bears and their management in and around the general Catskill Region (Orange, Ulster, Greene, Sullivan, Delaware, Schoharie, Otsego and Albany Counties). By the time you receive this reminder, you may have already completed and returned the questionnaire. However, if you have not yet completed the questionnaire, I would like to urge you to take a few minutes now to fill it out. In case you may have misplaced the first copy, a second questionnaire is enclosed.

Your reply is important if the survey results are to represent accurately the collective attitudes and interests of businesses and organizations toward black bears in the Catskills. This will help insure that the management of black bears in the region will be in your best interest.

Again, all information you provide is kept confidential; it is computer processed and never associated with your name.

Following completion of the study, we will be sending cooperators a summary of the results and some informative materials from the Department of Environmental Conservation about the Catskill black bear population and the Department's black bear research activities in the Catskill Region.

Thank you for your help.

Sincerely yours,

Daniel J. Decker

Daniel J. Decker
Research Support Specialist
Natural Resources

dm
Enclosure

New York State College of Agriculture and Life Sciences
a Statutory College of the State University
Cornell University

Department of Natural Resources
Fernow Hall, Ithaca, N. Y. 14853

Fishery Science
Forest Science
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Environmental Conservation

June 22, 1978

Dear Sir or Madam:

We still haven't received your questionnaire concerning black bears in and around the Catskill Region (Albany, Schoharie, Otsego, Delaware, Sullivan, Orange, Ulster and Greene Counties). It is important that we receive your reply so that the information we obtain will accurately reflect the collective attitudes and interests of all businesses and organizations owning land in the eight county region.

Your answers will remain confidential and will not be associated with your name or the name of your business or organization.

Thank you for your cooperation.

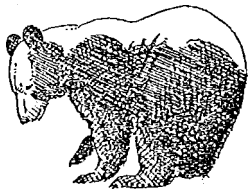
Sincerely yours,

Daniel J. Decker

Daniel J. Decker
Research Support Specialist
Natural Resources

dm

CATSKILL BLACK BEAR SURVEY



CATSKILL BLACK BEAR SURVEY

Conducted by the
Department of Natural Resources
in the State College of
Agriculture and Life Sciences
Cornell University

This study concerns the management of the black bear population in the Catskill Region. People who own land in Otsego, Schoharie, Albany, Greene, Ulster, Delaware, Sullivan or Orange Counties are being surveyed to determine their feelings about black bear. We need your response, even if you don't live in the Catskill region.

Would the household head please complete this survey at your earliest convenience, seal it (postage has been provided), and drop it in the nearest mailbox. Your responses will remain confidential and will never be associated with your name.

THANK YOU FOR YOUR COOPERATION.

CATSKILL BLACK BEAR SURVEY

Department of Natural Resources
Cornell University

1) Were you aware that black bears live in the Catskill Region?

_____ YES _____ NO

2) Have you ever seen a black bear in the Catskill Region?

_____ NO

_____ YES, in 1977 (How many times? _____)

_____ YES, in 1976 (How many times? _____)

_____ YES, before 1976

If you answered "YES" to any of the above, were any of the black bear sightings on your property?

_____ YES _____ NO

3) What trends have you seen in black bear populations in the area of the Catskills where your property is located for the two time periods below?

a) Trend from 1970 to the present?

_____ number of bears increased

_____ number of bears remained about the same

_____ number of bears decreased

_____ don't know

b) Trend from 1960 to 1970?

_____ number of bears increased

_____ number of bears remained about the same

_____ number of bears decreased

_____ don't know

4) What do you feel has the greatest influence on increases or decreases in black bear populations? (Please check one.)

_____ amount of forest land

_____ availability of food

_____ human recreational use of forest land

_____ hunting

_____ bear-vehicle highway accidents

_____ other (specify)

_____

5) Black bear habitat consists primarily of extensive tracts of forested land. What do you believe has been the trend in the amount of this black bear habitat in the Catskills over the last 20 years?

_____ amount of forested land has been increasing

_____ amount of forested land has been decreasing

_____ amount of forested land has remained relatively the same

_____ don't know

6) Which one of the following statements most closely agrees with your current feelings about black bears in the Catskills and surrounding region?

_____ Black bears are timid and stay away from people and residences.

_____ Black bears occasionally approach residences, but they seldom cause damage.

_____ Black bears frequently approach residences, and often cause damage.

_____ Black bears are unpredictable and are a menace to landowners.

_____ Not familiar enough with black bears to give an opinion.

7) In what ways do you enjoy the Catskill black bear resource? (Check all that apply.)

_____ like to observe bears or their sign (tracks, marking trees)

_____ like to photograph bears

_____ like to hunt bears (whether or not you have ever actually taken one)

_____ like to know that bears continue to exist in the Catskills

_____ other (Please specify): _____

_____ I have no interest in bears.

8) To what degree would you like to see black bears in the Catskill Region?

_____ I would occasionally like to see a bear on my property.

_____ I would occasionally like to see a bear near my property, although I wouldn't want one on my property.

_____ I would occasionally like to see a bear on outings to nearby undeveloped lands, but not around my property.

_____ I would only like to see a bear in remote areas of the Catskill Mountains.

_____ I have no interest in ever seeing a black bear in the wild.

9) Have black bears ever caused you any problems?

_____ NO _____ YES

a) If "YES," please indicate the year(s), type of problem(s), and estimate the damage costs, if any.

Year	Problem (please specify)	Cost ($)
____	_____	_____
____	_____	_____

b) If "YES," did you report this problem to the Department of Environmental Conservation?

_____ NO _____ YES

c) If "YES," were you satisfied with the Department's assistance?

_____ NO _____ YES

10) What level of annual nuisance activity from black bears in the Catskill Region would you tolerate?

_____ None

_____ An occasional annoyance, but no economic loss.

_____ Occasional annoyance, with minor (less than $100) economic loss.

_____ Occasional to frequent annoyance, with economic losses of $100 to $300.

_____ Occasional to frequent annoyance, with economic losses greater than $300.

11) If the black bear population in the Catskill Region were doubled (from about 300 to 600) do you feel that they would: (Please answer each question by checking (X) the appropriate response.)

	YES	NO	DON'T KNOW
a) cause an increased opportunity for desirable observation of bears by people in the Catskills?	___	___	___
b) cause an increased interest in recreational hunting of bears?	___	___	___
c) cause an increased occurrence of nuisance situations for landowners?	___	___	___
d) cause increased personal safety risks for people in the Catskills?	___	___	___
e) cause an increase in vehicle-bear highway accidents?	___	___	___
f) have little or no perceivable difference in bear-human interaction?	___	___	___

12) Do you feel it is important to maintain a population of black bears as part of the ecology of the Catskill Region?

_____ Yes, even to the point of developing land use regulations to protect all current bear habitat.

_____ Yes, but through a realistic balance of human land use needs and bear habitat requirements.

_____ Only to the extent that considerations for bear do not conflict with human land use needs.

_____ No, because human land use needs for bear habitat are more important than bears.

13) Would you want the Catskill black bear population to increase, realizing there are both potential costs (bear nuisances) and benefits (bear sightings) associated with a larger bear population?

_____ Yes, I want the bear population to increase.

_____ No, I don't want the bear population to increase.

_____ Don't know.

14) Do you hunt?

_____ NO _____ YES

If "YES," do you hunt big game?

_____ NO _____ YES

If "YES," would you shoot a bear?

_____ NO _____ YES

_____ DON'T KNOW

15) Do you think that black bear hunting is necessary as a control to insure that bear numbers are compatible with human land uses and available bear habitat?

_____ YES _____ NO _____ DON'T KNOW

16) Were you aware that the Department of Environmental Conservation has been involved in an intensive research study of the Catskill black bear population?

_____ YES _____ NO

The following information is needed to help us identify the characteristics of individuals who share common concerns or interests. With this information, the Department of Environmental Conservation can better direct their efforts to serve you. The following information you provide will be kept confidential and will not be associated with your name.

17) In what year were you born? _____ year

18) Sex: _____ Male _____ Female

19) What is your occupation? (If retired, student, housewife or unemployed, please also indicate.)

_____

20) Which of the following best describes the area of your primary residence? (Check one.)

_____ Rural (outside of village)

Is the rural area primarily:

agricultural _____

forested _____

_____ Village of under 1,000 population

_____ Village of 1,000 to 4,999

_____ City of 5,000 to 24,999

_____ City of 25,000 to 99,999

_____ City of 100,000 or more

Please use this space for any additional comments you wish to make:

THANK YOU FOR YOUR COOPERATION!

TO RETURN THIS QUESTIONNAIRE, simply seal it and deposit it in any mailbox. The postage has been provided.

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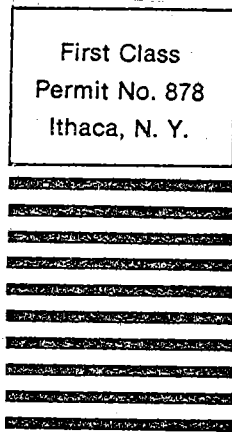
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Fishery Science
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April 18, 1978

Dear Rural Landowner:

The New York State Department of Environmental Conservation is evaluating the black bear population level in and around the Catskill Region. As part of this evaluation, the Department of Natural Resources at Cornell University has been asked to obtain input from people who own land in the Region. You have been chosen as part of a random sample of landowners to help in this evaluation.

A short questionnaire (enclosed) has been prepared to obtain information regarding your attitude toward black bears in the Catskills and any problems you may have experienced from black bears.

Please understand that even if you don't live on your land in the Catskills or if you have never seen a black bear in the Catskills, your responses on the questionnaire are valuable and needed. Also, since we are surveying only a sample of landowners, the response of <u>every</u> person is important if we are to get accurate and valid information.

Your name will not be associated with the information provided on your returned questionnaire. To return the questionnaire, simply seal it and drop it in a mailbox. Postage has been provided.

Following the completion of this study, we will be sending respondents a summary of the results and some informative materials from the Department of Environmental Conservation about the Catskill black bear population and the Department's black bear research activities in the Catskill Region.

Thank you for your cooperation and completed questionnaire.

Sincerely yours,

Daniel J. Decker

Daniel J. Decker
Research Support Specialist
Natural Resources

dm
Enclosure

New York State College of Agriculture and Life Sciences
a Statutory College of the State University
Cornell University

Department of Natural Resources
Fernow Hall, Ithaca, N. Y. 14853

Fishery Science
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April 25, 1978

Dear Rural Landowner:

About a week ago we sent you a questionnaire concerning black bears in the Catskill Region. If you have already returned the questionnaire, please disregard this reminder. In case you have not yet found the time to complete the questionnaire, may I ask you to take a few minutes now to fill it out.

Your answers, in addition to those of other randomly-selected landowners in the region, will help us provide the Department of Environmental Conservation with important information for the black bear management program in the Catskills. For this public input to be accurate, we need your response. It makes no difference whether or not you actually live on your land in the Catskills, or whether or not you have ever seen a black bear; your answers are still important.

All of the information which you provide will be kept confidential, and will not be associated with your name. Following the completion of the study, we will be sending respondents a summary of the results and some informative materials from the Department of Environmental Conservation about the Catskill black bear population and the Department's black bear research activities in the Catskill Region.

Thank you for your time and effort.

Sincerely yours,

Daniel J. Decker

Daniel J. Decker
Research Support Specialist
Natural Resources

dm

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a Statutory College of the State University
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Department of Natural Resources
Fernow Hall, Ithaca, N. Y. 14853

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May 9, 1978

Dear Rural Landowner:

Several weeks ago we sent you a questionnaire asking you to help us in an evaluation of public attitudes and interests toward black bears and their management in and around the Catskill Region (Orange, Albany, Delaware, Greene, Otsego, Schoharie, Ulster and Sullivan Counties). By the time you receive this reminder, you may have already completed and returned the questionnaire. However, if you have not yet completed the questionnaire I would like to urge you to take a few minutes now to fill it out. In case you may have misplaced the first copy, a second questionnaire is enclosed.

Only a selected sample of landowners in each county received this survey, so your reply is important if the survey results are to accurately represent the collective attitudes and interests of people who own land in the county.

Again, all information you provide is kept confidential; it is computer processed and is never associated with your name.

Following completion of the study, we will be sending respondents a summary of the results and some informative materials from the Department of Environmental Conservation about the Catskill black bear population and the Department's black bear research activities in the Catskill Region.

Thank you for your help.

Sincerely yours,

Daniel J. Decker

Daniel J. Decker
Research Support Specialist
Natural Resources

DJD:k
enclosure

New York State College of Agriculture and Life Sciences
a Statutory College of the State University
Cornell University

Department of Natural Resources
Fernow Hall, Ithaca, N. Y. 14853

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May 17, 1978

Dear Rural Landowner:

We still haven't received your questionnaire concerning black bears in and around the Catskill Region (Albany, Greene, Ulster, Orange, Sullivan, Schoharie, Delaware and Otsego Counties). It is important that we receive your reply so that the information we obtain will accurately reflect the interests of all people who own land in the Catskill Region.

Your answers will remain confidential and will not be associated with your name.

Thank you for your cooperation.

Sincerely yours,

Daniel J. Decker

Daniel J. Decker
Research Support Specialist
Natural Resources

dm

APPENDIX C:

SUPPLEMENTARY TABLES FOR CAMP MANAGER SURVEY

Table C-1. NUMBER OF PEOPLE AT CAMP DURING PEAK SEASON, BY BEAR RANGE AND TYPE OF CAMP

Bear Range	Number of Campers						
	50	50-99	100-199	200-299	300-499	500	N
	Percent						
Northern Occupied	7.9	22.2	33.4	9.5	14.3	12.7	63
Northern Unoccupied	13.0	18.2	33.7	19.5	7.8	7.8	77
Southern Occupied	6.3	12.5	22.5	22.5	23.7	12.5	80
Southern Unoccupied	(0)	(1)	(1)	(0)	(2)	(1)	5
Type of Camp							
Recreational Vehicle	16.3	22.8	20.7	13.0	14.1	13.0	92
Organizational	3.8	13.5	35.3	20.3	17.3	9.8	133
TOTAL	8.9	17.3	29.4	17.3	16.0	11.1	225

Table C-2. AGE OF PEOPLE ATTENDING CAMPS, BY BEAR RANGE AND TYPE OF CAMP

Bear Range	Age Groups[a]						
	All Ages	Under 10	10-12	13-15	16-18	Adults	N
	Percent						
Northern Occupied	50.8	20.6	39.7	31.7	20.6	20.6	63
Northern Unoccupied	53.2	28.6	41.6	44.2	22.1	10.4	77
Southern Occupied	37.5	35.0	43.8	48.8	18.8	13.8	80
Southern Unoccupied	(2)	(2)	(1)	(1)	(2)	(0)	5
Type of Camp							
Recreational Vehicle	91.3	1.1	1.1	1.1	0.0	10.9	92
Organizational	15.8	48.1	69.2	69.9	35.3	16.5	133
TOTAL	46.7	28.9	41.3	41.8	20.9	14.2	225

[a]For categories other than "all ages," some camps may be represented more than once.

Table C-3. PRIMARY OBJECTIVE OF CAMP, BY BEAR RANGE AND TYPE OF CAMP

Bear Range[a]	Objective								
	Recreational	Religious	Environmental Education	Physical Education	Environmental Education and Other	Hunting	Health	Other & Multiple Response	Total N
	Percent								
Northern Occupied	49.2	7.9	1.6	3.2	14.3	1.6	6.3	15.9	63
Northern Unoccupied	46.0	2.6	2.6	5.1	30.8	1.3	1.3	10.3	78
Southern Occupied	47.5	7.3	0.0	1.2	9.8	0.0	0.0	29.3	82
Southern Unoccupied	(5)	(2)	(0)	(1)	(1)	(0)	(0)	(3)	12[c]
Type of Camp[b]									
Recreational Vehicle	83.1	0.0	2.1	0.0	7.4	2.1	0.0	5.3	94
Organizational	22.4	11.2	0.7	5.2	26.1	0.0	6.7	27.7	134
TOTAL	47.2	6.4	1.3	3.4	17.9	0.9	3.8	19.1	235[d]

a X^2 test between bear ranges is significant at $p \geq .95$.

b X^2 test between recreational vehicle vs. organizational camps is significant at $p \geq .95$.

c Includes respondents to telephone follow-up.

d The sum of recreational vehicle and organizational do not add to 235 because the 7 respondents from the the telephone follow-up are not included.

Table C-4. CHARACTERISTICS OF AREA IN WHICH THE CAMPS ARE LOCATED, BY BEAR RANGE

Bear Range[a]	Characteristics of Area					Total N
	Rural-Agricultural	Rural-Forested	Rural-Unspecified	Village pop. < 1000	Village pop. ≥ 1000	
	Percent					
Northern Occupied	11.1	65.0	17.5	4.8	1.6	63
Northern Unoccupied	31.7	42.6	22.0	0.0	3.7	82
Southern Occupied	8.3	65.4	15.5	6.0	4.8	84
Southern Unoccupied	(4)	(1)	(0)	(0)	(0)	5
TOTAL	18.8	56.4	17.9	3.4	3.5	234

[a] χ^2 test between bear ranges is significant at $p \geq .95$.

Table C-5. PROPORTION OF CAMP MANAGERS REPORTING BEAR PROBLEMS AND YEAR OF PROBLEM, BY BEAR RANGE

Bear Range	Percent with Problem	Percent with Problem in 1978 or 1977	Percent with Problem in 1976	Percent with Problem prior to 1976	Total N
Northern Occupied	0.0	0.0	0.0	0.0	64
Northern Unoccupied	1.2	1.2	1.2	0.0	82
Southern Occupied	4.8	0.0	1.2	2.4	84
Southern Unoccupied	(0)	(0)	(0)	(0)	12
TOTAL	2.1	0.4	0.8	0.8	242

Table C-6. LEVEL OF ANNUAL NUISANCE ACTIVITY ACCEPTABLE TO CAMP MANAGERS, BY BEAR RANGE

Bear Range	Acceptable Annual Nuisance Activity					Total N
	None	Annoyance, no $ loss	Less than $100 loss	$100-300 loss	More than $300 loss	
	Percent					
Northern Occupied	41.1	34.4	18.0	1.6	4.9	61
Northern Unoccupied	36.4	42.8	15.6	2.6	2.6	77
Southern Occupied	36.6	30.5	26.8	3.7	2.4	82
Southern Unoccupied	(2)	(1)	(2)	(0)	(0)	5
TOTAL	37.8	35.6	20.9	2.7	3.1	225

Table C-7. CAMP MANAGERS' OPINIONS ON THE EFFECTS OF DOUBLING THE CATSKILL BLACK BEAR POPULATION, BY BEAR RANGE

Would doubling the bear population...

	Yes	No	Don't Know	Total
Increase observations?	Percent			N
Northern Occupied	45.9	34.4	19.7	61
Northern Unoccupied	49.3	23.4	27.3	77
Southern Occupied	56.2	22.5	21.3	80
Southern Unoccupied	(1)	(1)	(3)	5
TOTAL	50.2	26.0	23.8	223
Increase bear hunting?				
Northern Occupied	27.9	52.4	19.7	61
Northern Unoccupied	32.4	39.2	28.4	74
Southern Occupied	24.4	48.7	26.9	78
Southern Unoccupied	(0)	(3)	(2)	5
TOTAL	27.5	46.8	25.7	218
Increase nuisance?				
Northern Occupied	47.6	31.1	21.3	61
Northern Unoccupied	31.1	35.1	33.8	74
Southern Occupied	42.5	30.0	27.5	80
Southern Unoccupied	(4)	(1)	(0)	5
TOTAL	40.9	31.8	27.3	220
Increase safety risks?				
Northern Occupied	44.3	39.3	16.4	61
Northern Unoccupied	36.0	33.3	30.7	75
Southern Occupied	46.7	27.3	26.0	77
Southern Unoccupied	(4)	(1)	(0)	5
TOTAL	43.1	32.6	24.3	218

Table C-7.(cont'd) CAMP MANAGERS' OPINIONS ON THE EFFECTS OF DOUBLING THE CATSKILL BLACK BEAR POPULATION, BY BEAR RANGE

Would doubling the bear population...

	Yes	No	Don't Know	Total
	Percent			N
Increase bear-vehicle accidents?				
Northern Occupied	42.6	29.5	27.9	61
Northern Unoccupied	32.4	31.1	36.5	74
Southern Occupied	45.4	27.3	27.3	77
Southern Unoccupied	(1)	(1)	(3)	5
TOTAL	39.7	29.0	31.3	217
Increase number of campers?				
Northern Occupied	5.0	76.7	18.3	60
Northern Unoccupied	9.3	57.4	33.3	75
Southern Occupied	7.9	67.1	25.0	76
Southern Unoccupied	(0)	(4)	(1)	5
TOTAL	7.4	66.7	25.9	216
Decrease number of campers?				
Northern Occupied	26.2	41.0	32.8	61
Northern Unoccupied	18.1	38.9	43.0	72
Southern Occupied	29.1	45.6	25.3	79
Southern Unoccupied	(1)	(3)	(1)	5
TOTAL	24.4	42.4	33.2	217
Have little or no perceivable difference in bear-human interaction?				
Northern Occupied	28.8	23.7	47.5	59
Northern Unoccupied	40.5	18.9	40.5	74
Southern Occupied	34.3	18.6	47.1	70
Southern Unoccupied	(1)	(1)	(3)	5
TOTAL	34.6	20.2	45.2	208

Table C-8. FUTURE BEAR POPULATION TREND DESIRED BY CAMP MANAGERS, BY BEAR RANGE

Bear Range	Bear Population Trend Desired			Total N
	Increase	No Increase	Don't Know	
	Percent			
Northern Occupied	39.7	31.7	28.6	63
Northern Unoccupied	46.8	26.6	26.6	79
Southern Occupied	45.2	28.0	26.8	82
Southern Occupied[a]	(3)	(1)	(7)	11
TOTAL	43.4	27.7	28.9	235

[a]Includes respondents to the telephone follow-up.

Table C-9. CHARACTERISTICS OF AREA IN WHICH THE CAMPS ARE LOCATED, BY INCIDENCE OF CAMPERS' SIGHTING OF BEAR

Campers' Sighting	Characteristics of Area					Total N
	Rural-Agricultural	Rural-Forested	Rural-Unspecified	Village pop. <1000	Village pop. ≥1000	
	Percent					
Campers sighted bear	8.0	72.0	12.0	4.0	4.0	25
Campers did not sight bear	20.6	55.9	18.3	2.9	2.3	175
TOTAL	19.0	58.0	17.5	3.0	2.5	200

Table C-10. PRIMARY OBJECTIVE OF CAMP, BY INCIDENCE OF CAMPERS' SIGHTING OF BEAR

Campers' Sighting[a]	Objective								Total N
	Recreational	Religious	Environmental Education	Physical Education	Environmental Ed. & Other	Hunting	Health	Other & Multiple Response	
	Percent								
Campers sighted bear	48.0	0.0	0.0	0.0	44.0	4.0	0.0	4.0	25
Campers did not sight bear	47.1	7.6	1.2	3.5	15.9	0.6	4.1	20.0	170
TOTAL	47.2	6.7	1.0	3.1	19.5	1.0	3.6	17.9	195

[a] χ^2 test between those whose campers reported sightings vs. those whose campers did not report sightings is significant at $p \geq .95$.

Table C-11. CAMP MANAGERS' OPINIONS ON THE EFFECTS OF DOUBLING THE CATSKILL BLACK BEAR POPULATION, BY INCIDENCE OF CAMPERS' SIGHTING BEAR

Would doubling the bear population...	Yes	No	Don't Know	Total N
	Percent			
Increase observations?[a]				
Campers sighted bear	76.0	16.0	8.0	25
Campers did not sight bear	46.7	24.6	28.7	167
TOTAL	50.6	23.4	26.0	192
Increase bear hunting?				
Campers sighted bear	48.0	36.0	16.0	25
Campers did not sight bear	25.8	44.8	29.4	163
TOTAL	28.7	43.6	27.7	188
Increase nuisance?				
Campers sighted bear	24.0	48.0	28.0	25
Campers did not sight bear	43.0	29.1	27.9	165
TOTAL	40.5	31.6	27.9	190
Increase safety risks?				
Campers sighted bear	32.0	48.0	20.0	25
Campers did not sight bear	42.6	29.0	28.4	162
TOTAL	41.1	31.6	27.3	187
Increase bear-vehicle accidents?[a]				
Campers sighted bear	29.2	58.3	12.5	24
Campers did not sight bear	40.4	25.2	34.4	163
TOTAL	39.0	29.4	31.6	187

Table C-11 (cont'd). CAMP MANAGERS' OPINIONS ON THE EFFECTS OF DOUBLING THE CATSKILL BLACK BEAR POPULATION, BY INCIDENCE OF CAMPERS' SIGHTING BEAR

Would doubling the bear population...	Yes	No	Don't Know	Total
	Percent			N
Increase number of campers?				
Campers sighted bear	4.0	64.0	32.0	25
Campers did not sight bear	8.1	65.6	26.3	160
TOTAL	7.6	65.4	27.0	185
Decrease number of campers?				
Campers sighted bear	4.2	54.1	41.7	24
Campers did not sight bear	25.2	41.1	33.7	163
TOTAL	22.5	42.7	34.8	187
Have little or no perceivable difference in bear-human interaction?				
Campers sighted bear	50.0	12.5	37.5	24
Campers did not sight bear	32.5	21.7	45.9	157
TOTAL	34.8	20.4	44.8	181

[a] X^2 test between those whose campers reported sightings vs. those whose campers did not report sightings is significant at $p \geq .95$.

APPENDIX D:

SUPPLEMENTARY TABLES FOR CORPORATE LANDOWNER SURVEY

Table D-1. LEVEL OF ANNUAL NUISANCE ACTIVITY ACCEPTABLE TO CORPORATIONS, BY BEAR RANGE

Bear Range	Annual Acceptable Nuisance Activity					TOTAL N
	None	Annoyance, no $ loss	Less Than $100 loss	$100-$300 loss	More Than $300 loss	
	Percent					
Northern Occupied	40.7	34.6	18.5	3.7	2.5	81
Northern Unoccupied	45.6	35.4	15.2	1.3	2.5	79
Southern Occupied	41.3	38.7	10.7	4.0	5.3	75
Southern Unoccupied	42.2	37.8	6.7	8.9	4.4	45
TOTAL	42.3	36.5	13.8	3.9	3.5	282

Table D-2. CORPORATION REPRESENTATIVES' OPINIONS OF THE EFFECTS OF DOUBLING THE CATSKILL BLACK BEAR POPULATION, BY BEAR RANGE

Would doubling the bear population...

	No	Yes	Don't Know	TOTAL
	Percent			N
Increase observations?				
Northern Occupied	2.4	71.4	26.2	84
Northern Unoccupied	3.6	66.3	30.1	83
Southern Occupied	9.7	72.2	18.1	72
Southern Unoccupied	2.3	70.4	27.3	44
TOTAL	4.6	69.8	25.6	285
Increase bear hunting?				
Northern Occupied	3.5	82.4	14.1	85
Northern Unoccupied	3.7	76.8	19.5	82
Southern Occupied	5.7	84.3	10.0	70
Southern Unoccupied	0.0	67.4	32.6	43
TOTAL	3.5	79.1	17.4	282
Increase nuisance?				
Northern Occupied	45.2	25.0	29.8	84
Northern Unoccupied	34.9	24.1	41.0	83
Southern Occupied	38.2	30.9	30.9	68
Southern Unoccupied	30.2	25.6	44.2	43
TOTAL	38.2	26.1	35.7	280
Increase safety risks?				
Northern Occupied	50.0	28.6	21.4	84
Northern Unoccupied	38.6	24.1	37.3	83
Southern Occupied	33.3	37.7	29.0	69
Southern Unoccupied	36.4	31.8	31.8	44
TOTAL	40.4	29.8	29.8	282
Increase bear-vehicle accidents?				
Northern Occupied	40.5	25.0	34.5	84
Northern Unoccupied	31.7	24.4	43.9	82
Southern Occupied	34.8	33.3	31.9	69
Southern Unoccupied	27.9	30.2	41.9	43
TOTAL	35.0	27.5	37.5	280

Table D-2 (cont'd) CORPORATIONS REPRESENTATIVES' OPINIONS OF THE EFFECTS OF DOUBLING THE CATSKILL BLACK BEAR POPULATION, BY BEAR RANGE

Would doubling the bear population...

	No	Yes	Don't Know	TOTAL
	Percent			N
Increase business value?				
Northern Occupied	59.5	9.5	31.0	84
Northern Unoccupied	57.4	8.8	33.8	80
Southern Occupied	57.4	14.7	27.9	68
Southern Unoccupied	45.2	14.3	40.5	42
TOTAL	56.6	11.2	32.2	276
Decrease business value?				
Northern Occupied	54.8	8.3	36.9	84
Northern Unoccupied	53.7	8.8	37.5	80
Southern Occupied	53.7	18.8	27.5	69
Southern Unoccupied	42.9	14.2	42.9	42
TOTAL	52.7	11.9	35.4	277
Have little or no perceivable difference in bear-human interaction? [a]				
Northern Occupied	11.8	47.0	41.2	85
Northern Unoccupied	9.8	48.7	41.5	82
Southern Occupied	25.7	34.3	40.0	70
Southern Unoccupied	6.8	40.9	52.3	44
TOTAL	13.8	43.8	42.4	283

[a] χ^2 test between bear ranges is significant at $p \geq .95$.

Table D-3. FUTURE BLACK BEAR POPULATION TREND DESIRED BY CORPORATION REPRESENTATIVES, BY BEAR RANGE

Bear Range	Bear Population Trend Desired			TOTAL
	Increase	No Increase	Don't Know	
	Percent			N
Northern Occupied	44.0	15.5	40.5	84
Northern Unoccupied	41.8	23.3	34.9	86
Southern Occupied	44.8	26.3	28.9	76
Southern Unoccupied	32.6	17.4	50.0	46
TOTAL	41.9	20.7	37.4	294

Table D-4. CORPORATION REPRESENTATIVES' OPINIONS OF THE EFFECT OF DOUBLING THE CATSKILL BEAR POPULATION, BY AWARENESS OF BEARS

Would doubling the bear population...

	No	Yes	Don't Know	TOTAL
Increase observations? [a]		Percent		N
Not aware of bears	8.9	24.4	66.7	45
Aware of bears	4.1	82.8	13.1	222
Don't know	0.0	22.2	77.8	18
TOTAL	4.6	69.8	25.6	285
Increase bear hunting?[a]				
Not aware of bears	6.8	45.5	47.7	44
Aware of bears	3.2	89.6	7.2	221
Don't know	0.0	29.4	70.6	17
TOTAL	3.5	79.1	17.4	282
Increase nuisance?[a]				
Not aware of bears	9.3	27.9	62.8	43
Aware of bears	46.1	25.6	28.3	219
Don't know	11.8	23.5	69.7	17
TOTAL	38.4	25.8	35.8	279
Increase safety risks?[a]				
Not aware of bears	9.0	45.5	45.5	44
Aware of bears	50.0	27.3	22.7	220
Don't know	0.0	17.6	82.4	17
TOTAL	40.6	29.5	29.9	281
Increase bear-vehicle accidents?[a]				
Not aware of bears	13.6	29.5	56.9	44
Aware of bears	41.7	28.0	30.3	218
Don't know	5.9	11.8	82.3	17
TOTAL	35.1	27.2	37.7	279

Table D-4 (cont'd). CORPORATION REPRESENTATIVES' OPINIONS OF THE EFFECT OF DOUBLING THE CATSKILL BEAR POPULATION, BY AWARENESS OF BEARS

Would doubling the bear population...

	No	Yes	Don't Know	TOTAL
	Percent			N
Increase business value?[a]				
Not aware of bears	46.5	2.3	51.2	43
Aware of bears	61.1	13.4	25.5	216
Don't know	23.5	5.9	70.6	17
TOTAL	56.6	11.2	32.2	276
Decrease business value?[a]				
Not aware of bears	22.2	24.4	53.4	45
Aware of bears	63.6	7.9	28.5	214
Don't know	0.0	27.8	72.2	18
TOTAL	52.7	11.9	35.4	277
Have little or no perceivable difference on bear-human interaction?[a]				
Not aware of bears	4.4	26.7	68.9	45
Aware of bears	16.0	49.8	34.2	219
Don't know	10.5	15.8	73.7	19
TOTAL	13.8	43.8	42.4	283

[a] χ^2 test significant at $p \geq .95$ for those aware of bears vs. others.

APPENDIX E:

SUPPLEMENTARY TABLES FOR PRIVATE LANDOWNER SURVEY

Table E-2. AGE OF PRIVATE LANDOWNER RESPONDENTS, BY RANGE

Bear Range / Residence Status	AGE GROUPS (Percent)							Mean Age In Years	Total N
	≤19	20-29	30-39	40-49	50-59	60-69	≥70		
Northern Occupied[a]									
Resident	0.5	8.2	14.8	13.2	20.9	22.6	19.8	54	182
Absentee	0.0	3.1	18.6	27.2	25.8	19.1	6.2	50	194
Northern Unoccupied									
Resident	0.4	5.8	15.8	22.1	21.3	25.4	9.2	52	240
Absentee	1.7	2.2	17.4	21.7	27.4	23.5	6.1	51	230
Southern Occupied[a]									
Resident	1.1	2.7	14.9	9.6	25.5	22.3	23.9	56	188
Absentee	0.0	3.0	8.5	20.0	32.2	24.8	11.5	55	165
Southern Unoccupied[a]									
Resident	0.6	6.5	16.5	19.4	24.7	17.6	14.7	52	170
Absentee	0.0	2.1	14.9	8.5	32.7	23.4	18.4	56	141
Aggregate[b]									
Resident	0.6	5.8	15.5	16.4	23.0	22.3	16.4	53	780
Absentee	0.5	2.6	15.2	20.3	29.1	22.6	9.7	53	730

[a] χ^2 test between residents vs. absentees is significant at $p \geq .95$ for this bear range.

[b] χ^2 test between residents vs. absentees is significant at $p \geq .95$

Table E-3. OCCUPATION OF PRIVATE LANDOWNER RESPONDENTS, BY RANGE

Bear Range Residence Status	OCCUPATION									N
	White Collar[a]	Blue Collar[b]	Farming	Service	Student	Housewife	Retired	Unemployed	Misc.	
	Percent									
Northern Occupied										
Resident	28.0	17.5	7.1	3.3	1.6	6.0	31.9	0.5	3.8	182
Absentee	41.4	18.3	0.0	7.3	1.0	7.9	18.3	1.0	4.7	191
Northern Unoccupied										
Resident	29.9	20.7	14.5	2.6	0.4	5.7	23.3	0.9	1.8	227
Absentee	48.7	17.4	0.9	4.0	2.2	5.8	18.3	1.8	0.8	224
Southern Occupied										
Resident	20.8	21.9	4.5	5.6	1.1	7.3	34.3	0.6	3.9	178
Absentee	35.8	16.7	0.6	6.2	1.9	11.7	25.3	0.6	1.2	162
Southern Unoccupied										
Resident	31.9	16.9	13.3	4.2	2.4	6.0	22.9	0.6	1.8	166
Absentee	40.6	12.3	2.9	5.1	0.0	9.4	26.8	0.0	2.9	138
Aggregate										
Resident	27.7	19.4	10.1	3.9	1.3	6.2	27.9	0.7	2.8	753
Absentee	42.2	16.5	1.0	5.6	1.4	8.4	21.5	1.0	2.4	715

[a] Professional, official, administrative, sales and clerical

Table E-4. DEMOGRAPHIC DESCRIPTION OF PRIVATE LANDOWNER RESPONDENTS' PRIMARY RESIDENCE, BY RANGE

Bear Range Residence Status	Rural Unspecified	Rural Agricultural	Rural Forested	Village <1000	Village 1000-4999	City 5000-24,999	City 25,000-99,999	City ≥100,000	Multiple	N
	Percent									
Northern Occupied[a]										
Resident	11.5	13.7	50.5	4.9	4.4	0.5	1.1	1.1	12.1	182
Absentee	12.0	11.5	27.6	1.6	5.7	7.8	7.3	19.3	7.3	192
Northern Unoccupied[a]										
Resident	21.3	43.9	19.2	3.3	29.2	1.3	1.3	0.0	6.7	239
Absentee	11.3	15.2	20.4	2.6	7.4	13.9	6.5	16.1	6.5	230
Southern Occupied[a]										
Resident	14.1	14.1	56.3	4.7	1.6	0.0	0.0	1.0	8.3	192
Absentee	10.9	4.8	35.8	3.6	5.5	12.7	4.8	19.4	2.4	165
S. Unoccupied										
Resident	17.5	39.2	25.1	2.9	6.4	0.6	0.0	1.2	7.0	171
Absentee	16.2	16.2	16.9	2.1	6.3	8.5	11.3	15.5	7.0	142
Aggregate[b]										
Resident	16.5	28.6	36.8	4.0	3.7	0.6	0.6	0.8	8.4	784
Absentee	12.3	12.1	25.0	2.5	6.3	11.0	7.3	17.6	5.9	729

[a] X^2 test between residents vs. absentees is significant at $p \geq .95$ for this bear range.

[b] X^2 test between residents vs. absentees is significant at $p \geq .95$.

Table E-5. PRIVATE LANDOWNERS' AWARENESS OF DEC's BLACK BEAR RESEARCH IN THE CATSKILL REGION, BY RANGE

Bear Range Residence Status	Percent Unaware of DEC Study	Percent Aware of DEC Study	N
Northern Occupied			
Resident	65.9	34.1	179
Absentee	73.3	26.7	195
Northern Unoccupied[a]			
Resident	73.8	26.2	244
Absentee	82.6	17.4	230
Southern Occupied[a]			
Resident	64.4	35.6	191
Absentee	82.0	18.0	161
Southern Unoccupied			
Resident	74.7	25.3	166
Absentee	81.2	18.8	138
Aggregate[b]			
Resident	69.9	30.1	780
Absentee	79.7	20.3	724

[a] χ^2 test between residents vs. absentees is significant at $p \geq .95$ for this bear range.

[b] χ^2 test between residents vs. absentees is significant at $p \geq .95$.

Table E-6. PRIVATE LANDOWNERS' INVOLVEMENT IN HUNTING, BY RANGE

Bear Range / Residence Status	HUNTING STATUS			BIG GAME HUNTING STATUS			BEAR HUNTING STATUS OF BIG GAME HUNTERS			
	Nonhunter	Hunter	N	Not a Big Game Hunter	Big Game Hunter	N	Those Who Would Not Shoot a Bear	Those Who Would Shoot a Bear	Those Who Don't Know If They Would Shoot a Bear	N
	Percent			Percent			Percent			
Northern Occupied										
Resident	49.2	50.8	181	53.0	47.0	181	20.0	64.7	15.3	85
Absentee	57.9	42.1	195	60.5	39.5	195	16.0	68.0	16.0	75
Northern Unoccupied										
Resident	56.1	43.9	246	57.7 a	42.3	246	23.1	59.6	17.3	104
Absentee	61.7	38.3	230	67.8	32.2	230	16.2	62.2	21.6	74
Southern Occupied										
Resident	46.9 a	53.1	192	49.5 a	50.5	192	19.8	59.4	20.8	96
Absentee	70.4	29.6	162	71.0	29.0	162	15.2	60.9	23.9	46
Southern Unoccupied										
Resident	64.5 a	35.5	169	68.0 a	32.0	169	18.5	63.0	18.5	54
Absentee	76.4	23.6	140	79.3	20.7	140	27.6	51.7	20.7	29
Aggregate										
Resident	54.1 b	45.9	788	56.9 b	43.1	788	20.6	61.4	18.0	339
Absentee	65.5	34.5	727	68.8	31.2	727	17.4	62.5	20.1	224

a χ^2 test between residents vs. absentees is significant at $p \geq .95$ for this bear range and level of hunting involvement.

b χ^2 test between residents vs. absentees is significant at $p \geq .95$ for this level of hunting involvement.

Table E-7. PRIVATE LANDOWNERS' OPINION ON THE NECESSITY OF HUNTING TO CONTROL BLACK BEAR NUMBERS, BY RANGE

Bear Range / Resident Status	Percent Who Do Not Think Hunting is Necessary	Percent Who Do Think Hunting is Necessary	Percent Who Do Not Know If Hunting is Necessary	N
Northern Occupied				
Resident	32.6	38.3	29.1	175
Absentee	35.9	37.0	27.1	192
Northern Unoccupied[a]				
Resident	27.0	43.6	29.5	241
Absentee	27.4	30.0	42.6	230
Southern Occupied				
Resident	25.3	44.2	30.5	190
Absentee	27.7	37.7	34.6	159
Southern Unoccupied				
Resident	30.1	32.5	37.4	163
Absentee	33.1	28.7	38.2	136
Aggregate				
Resident	28.5	40.2	31.3	769
Absentee	30.8	33.3	35.9	717

a χ^2 test between residents vs. absentees is significant at $p \geq .95$ for this bear range.

Table E-8. LEVEL OF ANNUAL NUISANCE ACTIVITY ACCEPTABLE TO PRIVATE LANDOWNERS, BY RANGE

Bear Range / Residence Status	ACCEPTABLE ANNUAL NUISANCE ACTIVITY					
	None	Annoyance, No $ loss	Less than $100 loss	$100 to $300 loss	More than $300 loss	N
	Percent					
Northern Occupied						
Resident	15.9	40.3	27.8	9.1	6.8	176
Absentee	15.3	46.3	27.9	5.8	4.7	190
Northern Unoccupied						
Resident	23.9	44.4	24.4	2.6	4.7	234
Absentee	17.3	43.1	32.0	5.3	2.2	225
Southern Occupied						
Resident	19.9	44.1	30.1	4.3	1.6	186
Absentee	25.0	43.1	26.3	4.4	1.3	160
Southern Unoccupied						
Resident	26.7	41.0	24.8	3.1	4.3	161
Absentee	27.4	36.3	31.1	3.7	1.5	135
Aggregate						
Resident	21.7	42.6	26.7	4.6	4.4	757
Absentee	20.4	42.8	29.4	4.9	2.5	710

Table E-9. PRIVATE LANDOWNERS' OPINION ON THE EFFECTS OF DOUBLING THE CATSKILL BLACK BEAR POPULATION, BY RANGE

Bear Range / Residence Status	Would doubling the bear population cause... Increased Observations? No	Yes	Don't Know	N	Increased Hunting? No	Yes	Don't Know	N	Increased Nuisance? No	Yes	Don't Know	N
	Percent				Percent				Percent			
Northern Occupied												
Resident	6.3	86.1	7.6	158	5.1	87.3	7.6	157	50.0	27.3	22.7[a]	150
Absentee	6.6	77.1	15.9	182	3.9	82.8	13.3	180	27.3	47.7	25.0	172
Northern Unoccupied												
Resident	5.4	77.1	17.5	223	7.1	83.2	9.7	226	28.4	46.3	25.2	218
Absentee	2.8	84.0	13.1	213	7.5	76.5	16.0	213	26.8	44.0	29.2	209
Southern Occupied												
Resident	8.5	80.2	11.3[a]	177	6.4	84.4	9.2[a]	173	43.6	29.4	27.0[a]	163
Absentee	4.5	72.7	22.7	154	7.2	73.2	19.6	153	27.5	42.3	30.2	149
Southern Unoccupied												
Resident	7.8	77.8	14.4	153	7.3	76.7	16.0	150	29.9	42.2	27.9	147
Absentee	5.7	68.9	25.4	122	8.3	70.2	21.5	121	20.8	52.5	26.7	120
Aggregate												
Resident	6.9	80.0	13.1[b]	711	6.5	83.0	10.5[b]	706	37.2	37.2	25.6[b]	678
Absentee	4.8	76.9	18.3	671	6.6	76.3	17.1	667	26.0	46.2	27.8	650

Table E-9 (cont'd). PRIVATE LANDOWNERS' OPINION ON THE EFFECTS OF DOUBLING THE CATSKILL BLACK BEAR POPULATION, BY RANGE

Bear Range / Residence Status	Would doubling the bear population cause... Increased Safety Risks? No	Yes	Don't Know	N	Increased Bear-Vehicle Accidents? No	Yes	Don't Know	N	No Perceivable Difference in Bear-Human Interaction? No	Yes	Don't Know	N
	Percent				Percent				Percent			
Northern Occupied												
Resident	65.5	18.6	15.9	145	50.3	31.0	18.6	145	25.4	49.3	25.4	138
Absentee	44.6	28.8	26.6[a]	177	40.1	32.6	27.3	172	27.2	41.0	31.8	173
Northern Unoccupied												
Resident	49.8	26.0	24.2	219	36.4	35.9	27.6	217	24.9	33.3	41.8	213
Absentee	44.0	26.8	29.2	209	41.0	30.2	28.8	205	24.5	37.5	38.0	200
Southern Occupied												
Resident	60.0	17.6	22.4	165	48.1	28.8	23.1[a]	160	19.7	43.3	36.9	157
Absentee	47.0	29.8	23.2[a]	151	35.6	26.8	37.6	149	15.8	37.0	47.3	146
Southern Unoccupied												
Resident	50.0	23.0	27.0	148	32.6	30.6	36.8	144	22.4	36.4	41.3	143
Absentee	33.6	32.8	33.6[a]	119	34.5	36.2	29.3	116	22.1	29.2	48.7	113
Aggregate												
Resident	55.7	21.7	22.6[b]	677	41.4	32.0	26.6	666	23.2	39.8	37.0	651
Absentee	43.0	29.1	27.9	656	38.3	31.2	30.5	642	22.8	36.9	40.3	632

[a] X^2 test between residents vs. absentees is significant at $p \geq .95$ for this bear range.

[b] X^2 test between residents vs. absentees is significant at $p \geq .95$.

Table E-10. FUTURE BEAR POPULATION TREND DESIRED BY PRIVATE LANDOWNERS, BY RANGE

Bear Range / Residence Status	Bear Population Trend Desired			N
	Increase	No Increase	Don't Know	
	Percent			
Northern Occupied				
Resident	71.3	12.2	16.6	181
Absentee	60.8	16.5	22.7	194
Northern Unoccupied				
Resident	54.5	20.1	25.4	244
Absentee	59.2	14.9	25.9	228
Southern Occupied[a]				
Resident	67.2	17.2	15.6	192
Absentee	54.7	14.3	31.1	161
Southern Unoccupied				
Resident	55.7	14.4	29.9	167
Absentee	43.5	17.4	39.1	138
Aggregate[b]				
Resident	61.8	16.3	21.9	784
Absentee	55.6	15.7	28.7	721

[a] X^2 test between residents vs. absentees is significant at $p \geq .95$ for this bear range.

[b] X^2 test between residents vs. absentees is significant at $p \geq .95$.

Table E-11. FUTURE BEAR POPULATION TREND DESIRED BY RESIDENT LANDOWNERS, BY PERSONAL SIGHTINGS AND BEAR RANGE

Bear Range / Personal Sightings	Bear Population Trend Desired			N
	Increase	No Increase	Don't Know	
	Percent			
Northern Occupied[a]				
Sighted	79.8	10.1	10.1	89
Haven't Sighted	63.1	14.1	22.8	92
TOTAL	71.2	12.2	16.6	181
Northern Unoccupied[a]				
Sighted	71.4	14.3	14.3	63
Haven't Sighted	48.9	22.2	28.9	180
TOTAL	54.7	20.2	25.1	243
Southern Occupied[a]				
Sighted	73.2	17.6	9.2	119
Haven't Sighted	55.8	17.1	27.1	70
TOTAL	66.6	17.5	15.9	189
Southern Unoccupied				
Sighted	62.2	6.7	31.1	45
Haven't Sighted	53.7	17.4	28.9	121
TOTAL	56.0	14.5	29.5	166

[a] χ^2 test between those who have vs. haven't sighted bear is significant at $p \geq .95$ for this bear range.

Table E-12. FUTURE BEAR POPULATION TREND DESIRED BY ABSENTEE LANDOWNERS, BY PERSONAL SIGHTINGS AND BEAR RANGE

Bear Range / Personal Sightings	Bear Population Trend Desired			N
	Increase	No Increase	Don't Know	
	Percent			
Northern Occupied[a]				
Sighted	75.8	11.3	12.9	62
Haven't Sighted	53.8	18.9	27.3	132
TOTAL	60.8	16.5	22.7	194
Northern Unoccupied[a]				
Sighted	85.3	8.8	5.9	34
Haven't Sighted	54.6	16.0	29.4	194
TOTAL	59.2	14.9	25.9	228
Southern Occupied				
Sighted	64.4	10.2	25.4	59
Haven't Sighted	49.0	16.7	34.3	102
TOTAL	54.6	14.3	31.1	161
Southern Unoccupied[a]				
Sighted	65.6	17.2	17.2	29
Haven't Sighted	37.0	17.6	45.4	108
TOTAL	43.1	17.5	39.4	137

a χ^2 test between those who have vs. haven't sighted bear is significant at $p \geq .95$ for this bear range.

Table E-13. PROXIMITY OF BEAR SIGHTINGS DESIRED BY RESIDENT LANDOWNERS, BY PERSONAL SIGHTINGS AND BEAR RANGE

Bear Range / Personal Sightings	Location of Bear Sightings Desired: On Own Property	Near Own Property	On Nearby Undeveloped Land	In Remote Areas of the Catskill Mts.	Never	N
	Percent					
Northern Occupied						
Sighted	51.7	5.6	23.6	14.6	4.5	89
Haven't Sighted	41.5	3.2	20.2	22.3	12.8	94
TOTAL	46.4	4.4	21.9	18.6	8.7	183
Northern Unoccupied[a]						
Sighted	48.5	10.9	14.1	15.6	10.9	64
Haven't Sighted	30.9	5.1	17.4	32.6	14.0	178
TOTAL	35.6	6.6	16.5	28.1	13.2	242
Southern Occupied[a]						
Sighted	60.8	9.2	12.5	13.3	4.2	120
Haven't Sighted	38.0	12.7	18.3	12.7	18.3	71
TOTAL	52.3	10.5	14.7	13.1	9.4	191
Southern Unoccupied						
Sighted	40.9	11.4	25.0	18.2	4.5	44
Haven't Sighted	30.3	4.9	20.5	28.7	15.6	122
TOTAL	33.1	6.6	21.7	25.9	12.7	166

[a] χ^2 test between those who have vs. haven't sighted bear is significant at $p \geq .95$ for this bear range.

Table E-14. PROXIMITY OF BEAR SIGHTINGS DESIRED BY ABSENTEE LANDOWNERS, BY PERSONAL SIGHTINGS AND BEAR RANGE

Bear Range / Personal Sightings	Location of Bear Sightings Desired: On Own Property	Near Own Property	On Nearby Undeveloped Land	In Remote Areas of the Catskill Mts.	Never	N
	Percent					
Northern Occupied[a]						
Sighted	55.9	10.2	10.2	16.9	6.8	59
Haven't Sighted	29.3	11.3	18.8	27.8	12.8	133
TOTAL	37.6	10.9	16.1	24.5	10.9	192
Northern Unoccupied						
Sighted	58.9	0.0	23.5	14.7	2.9	34
Haven't Sighted	38.1	3.1	19.1	29.4	10.3	194
TOTAL	41.3	2.6	19.7	27.2	9.2	228
Southern Occupied[a]						
Sighted	55.9	5.1	18.6	13.6	6.8	59
Haven't Sighted	32.7	6.7	13.5	24.0	23.1	104
TOTAL	41.2	6.1	15.3	20.2	17.2	163
Southern Unoccupied[a]						
Sighted	46.7	13.3	10.0	26.7	3.3	30
Haven't Sighted	22.2	2.8	20.4	32.4	22.2	108
TOTAL	27.5	5.1	18.1	31.2	18.1	138

[a] χ^2 test between those who have vs. haven't sighted bear is significant at $p \geq .95$ for this bear range.

Table E-15. LEVEL OF NUISANCE ACTIVITY ACCEPTABLE TO RESIDENT LANDOWNERS, BY PERSONAL SIGHTINGS AND BEAR RANGE

Bear Range / Personal Sightings	Acceptable Annual Nuisance Activity: None	Annoyance, no $ loss	Less than $100 loss	$100-300 loss	More Than $300 loss	Total N
	Percent					
Northern Occupied[a]						
Sighted	12.2	35.6	37.7	6.7	7.8	90
Haven't Sighted	19.8	45.4	17.4	11.6	5.8	86
TOTAL	15.9	40.4	27.8	9.1	6.8	176
Northern Unoccupied[a]						
Sighted	11.3	48.4	30.6	1.6	8.1	62
Haven't Sighted	28.7	42.7	22.2	2.9	3.5	171
TOTAL	24.0	44.2	24.5	2.6	4.7	233
Southern Occupied[a]						
Sighted	12.4	47.7	31.9	5.3	2.7	113
Haven't Sighted	32.9	37.1	27.1	2.9	0.0	70
TOTAL	20.2	43.7	30.1	4.4	1.6	183
Southern Unoccupied						
Sighted	13.6	50.1	27.3	4.5	4.5	44
Haven't Sighted	31.6	37.6	23.9	2.6	4.3	117
TOTAL	26.7	41.1	24.8	3.1	4.3	161

[a] χ^2 test between those who have vs. haven't sighted bear is significant at $p \geq .95$ for this bear range.

Table E-16. LEVEL OF NUISANCE ACTIVITY ACCEPTABLE TO ABSENTEE LANDOWNERS, BY PERSONAL SIGHTINGS AND BEAR RANGE

Bear Range / Personal Sightings	Acceptable Annual Nuisance Activity					Total N
	None	Annoyance, no $ loss	Less Than $100 loss	$100-300 loss	More Than $300 Loss	
	Percent					
Northern Occupied						
Sighted	8.6	48.3	31.0	6.9	5.2	58
Haven't Sighted	18.2	45.5	26.5	5.3	4.5	132
TOTAL	15.3	46.3	27.9	5.8	4.7	190
Northern Unoccupied						
Sighted	5.9	44.1	41.2	8.8	0.0	34
Haven't Sighted	19.4	42.9	30.4	4.7	2.6	191
TOTAL	17.3	43.2	32.0	5.3	2.2	225
Southern Occupied						
Sighted	14.0	45.6	29.8	8.8	1.8	57
Haven't Sighted	31.1	41.7	24.3	1.9	1.0	103
TOTAL	25.0	43.1	26.3	4.4	1.3	160
Southern Unoccupied						
Sighted	13.3	40.0	43.4	3.3	0.0	30
Haven't Sighted	31.7	34.7	27.9	3.8	1.9	104
TOTAL	27.6	35.9	31.3	3.7	1.5	134

Table E-17. IMPORTANCE TO RESIDENT LANDOWNERS OF MAINTAINING A POPULATION OF BLACK BEARS IN THE CATSKILLS, BY PERSONAL SIGHTINGS AND BEAR RANGE

Bear Range / Personal Sightings	Importance Indicator: Protect habitat with land use regulations	Balance bear-human land needs	Only if no conflicts with human needs	Human needs more important than bears	Total N
	Percent				
Northern Occupied					
Sighted	48.9	33.0	13.6	4.5	88
Haven't Sighted	32.2	38.0	26.4	3.4	87
TOTAL	40.6	35.4	20.0	4.0	175
Northern Unoccupied					
Sighted	27.4	41.9	22.6	8.1	62
Haven't Sighted	25.9	41.4	26.4	6.3	174
TOTAL	26.3	41.5	25.4	6.8	236
Southern Occupied					
Sighted	34.7	44.2	18.6	2.5	118
Haven't Sighted	32.8	37.4	17.9	11.9	67
TOTAL	34.1	41.6	18.4	5.9	185
Southern Unoccupied					
Sighted	28.9	48.9	17.8	4.4	45
Haven't Sighted	35.5	43.0	16.5	5.0	121
TOTAL	33.7	44.6	16.9	4.8	166

Table E-18. IMPORTANCE TO ABSENTEE LANDOWNERS OF MAINTAINING A POPULATION OF BLACK BEARS IN THE CATSKILLS, BY PERSONAL SIGHTINGS AND BEAR RANGE

Bear Range / Personal Sightings	Importance Indicator: Protect habitat with land use regulations	Balance bear-human land needs	Only if no conflicts with human needs	Human needs more important than bears	Total N
	Percent				
Northern Occupied					
Sighted	50.8	36.1	11.5	1.6	61
Haven't Sighted	35.9	36.7	22.1	5.3	131
TOTAL	40.5	36.5	18.8	4.2	192
Northern Unoccupied					
Sighted	44.1	41.2	11.8	2.9	34
Haven't Sighted	36.4	40.0	20.9	2.7	187
TOTAL	37.6	40.2	19.5	2.7	221
Southern Occupied					
Sighted	37.3	42.3	15.3	5.1	59
Haven't Sighted	34.3	37.4	19.2	9.1	99
TOTAL	35.4	39.3	17.7	7.6	158
Southern Unoccupied					
Sighted	40.0	36.7	20.0	3.3	30
Haven't Sighted	34.6	39.3	16.8	9.3	107
TOTAL	35.8	38.7	17.5	8.0	137

Table E-19. ATTITUDES OF RESIDENT LANDOWNERS TOWARD THE BEHAVIOR OF BLACK BEAR, BY PERSONAL SIGHTINGS AND BEAR RANGE

Bear Range / Personal Sightings	Attitude Toward Black Bear: Timid	Seldom Damage	Often Damage	Menace	Not Familiar with Bears	Total N
	Percent					
Northern Occupied[a]						
Sighted	55.1	24.7	2.2	3.4	14.6	89
Haven't Sighted	42.0	15.8	0.0	1.1	41.1	95
TOTAL	48.3	20.1	1.1	2.2	28.3	184
Northern Unoccupied[a]						
Sighted	46.9	25.0	0.0	3.1	25.0	64
Haven't Sighted	24.0	22.9	1.7	3.4	48.0	179
TOTAL	30.0	23.5	1.2	3.3	42.0	243
Southern Occupied[a]						
Sighted	37.2	47.0	1.7	1.7	12.4	121
Haven't Sighted	31.0	23.9	1.4	0.0	43.7	71
TOTAL	34.9	38.5	1.6	1.0	24.0	192
Southern Unoccupied[a]						
Sighted	38.6	34.1	0.0	2.3	25.0	44
Haven't Sighted	22.6	21.8	1.6	1.6	52.4	124
TOTAL	26.8	25.0	1.2	1.8	45.2	168

[a] χ^2 test between those who have vs. haven't sighted bear is significant at $p \geq .95$ for this bear range.

Table E-20. ATTITUDES OF ABSENTEE LANDOWNERS TOWARD THE BEHAVIOR OF BLACK BEAR, BY PERSONAL SIGHTINGS AND BEAR RANGE

Bear Range / Personal Sightings	Attitude Toward Black Bear: Timid	Seldom Damage	Often Damage	Menace	Not Familiar with Bears	Total N
	Percent					
Northern Occupied[a]						
Sighted	38.7	35.5	0.0	3.2	22.6	62
Haven't Sighted	23.0	23.0	1.5	1.5	51.0	135
TOTAL	27.9	26.9	1.0	2.0	42.2	197
Northern Unoccupied[a]						
Sighted	32.4	44.1	2.9	0.0	20.6	34
Haven't Sighted	23.6	17.6	2.0	1.0	55.8	199
TOTAL	24.9	21.5	2.1	0.9	50.6	233
Southern Occupied[a]						
Sighted	31.1	42.6	3.3	6.6	16.4	61
Haven't Sighted	16.3	21.2	2.9	0.0	59.6	104
TOTAL	21.8	29.1	3.0	2.4	43.7	165
Southern Unoccupied[a]						
Sighted	23.3	53.4	3.3	0.0	20.0	30
Haven't Sighted	14.5	16.4	1.8	2.7	64.5	110
TOTAL	16.4	24.3	2.1	2.1	55.1	140

[a] X^2 test between those who have vs. haven't sighted bear is significant at $p \geq .95$ for this bear range.

Table E-21. RESIDENT LANDOWNERS' ASSESSMENTS OF THE EFFECTS OF DOUBLING THE BLACK BEAR POPULATION, BY PERSONAL SIGHTINGS AND BEAR RANGE

Bear Range / Personal Sightings	Would doubling the bear population... Increase Nuisance? No	Yes	Don't Know	Total N	Increase Safety Risks? No	Yes	Don't Know	Total N	Increase Bear-Vehicle Accidents? No	Yes	Don't Know	Total N
	Percent				Percent				Percent			
Northern Occupied												
Sighted	60.0	21.3	18.7	75	72.2	13.9	13.9	72	61.1	22.2	16.7	72
Haven't Sighted	40.0	33.3	26.7[a]	75	58.9	23.3	17.8	73	39.7	39.7	20.6[a]	73
TOTAL	50.0	27.3	22.7	150	65.5	18.6	15.9	145	50.4	31.0	18.6	145
Northern Unoccupied												
Sighted	38.5	44.2	17.3	52	57.4	24.1	18.5	54	43.4	37.7	18.9	53
Haven't Sighted	25.5	46.6	27.9	165	47.6	26.8	25.6	164	34.4	35.5	30.1	163
TOTAL	28.6	46.1	25.3	217	50.0	26.1	23.9	218	36.6	36.1	27.3	216
Southern Occupied												
Sighted	45.4	28.3	26.3	99	65.6	17.2	17.2	99	53.1	29.2	17.7	96
Haven't Sighted	37.7	32.8	29.5	61	50.8	17.5	31.7	63	37.7	29.5	32.8	61
TOTAL	42.5	30.0	27.5	160	59.9	17.3	22.8	162	47.1	29.3	23.6	157
Southern Unoccupied												
Sighted	36.8	44.8	18.4	38	69.3	25.6	5.1	39	39.5	31.6	28.9	38
Haven't Sighted	27.5	41.3	31.2	109	43.1	22.0	34.9[a]	109	30.2	30.2	39.6	106
TOTAL	29.9	42.2	27.9	147	50.0	23.0	27.0	148	32.6	30.6	36.8	144

[a] X^2 test between those who have vs. haven't sighted bear is significant at $p \geq .95$ for this bear range.

Table E-22. ABSENTEE LANDOWNERS' ASSESSMENTS OF THE EFFECTS OF DOUBLING THE BLACK BEAR POPULATION, BY PERSONAL SIGHTINGS AND BEAR RANGE

Bear Range / Personal Sightings	Would doubling the bear population... Increase Nuisance? No	Yes	Don't Know	Total N	Increase Safety Risks? No	Yes	Don't Know	Total N	Increase Bear-Vehicle Accidents No	Yes	Don't Know	Total N
	Percent				Percent				Percent			
Northern Occupied												
Sighted	37.3	50.9	11.8	51	55.8	26.9	17.3	52	58.8	29.4	11.8	51
Haven't Sighted	23.1	46.3	30.6[a]	121	40.0	29.6	30.4	125	32.2	33.9	33.9[a]	121
TOTAL	27.3	47.7	25.0	172	44.6	28.8	26.6	177	40.1	32.6	27.3	172
Northern Unoccupied												
Sighted	35.4	32.3	32.3	31	53.4	23.3	23.3	30	56.6	16.7	26.7	30
Haven't Sighted	25.3	46.0	28.7	178	42.4	27.4	30.2	179	38.3	32.6	29.1	175
TOTAL	26.8	44.0	29.2	209	44.0	26.8	29.2	209	41.0	30.2	28.8	205
Southern Occupied												
Sighted	35.2	40.7	24.1	54	58.9	26.8	14.3	56	37.5	28.6	33.9	56
Haven't Sighted	23.2	43.1	33.7	95	40.0	31.6	28.4[a]	95	34.4	25.8	39.8	93
TOTAL	27.5	42.3	30.2	149	47.0	29.8	23.2	151	35.6	26.8	37.6	149
Southern Unoccupied												
Sighted	34.6	42.3	23.1	26	57.1	14.3	28.6	28	50.0	19.2	30.8	26
Haven't Sighted	17.2	54.8	28.0	93	26.7	37.7	35.6[a]	90	30.3	40.5	29.2	89
TOTAL	21.0	52.1	26.9	119	33.9	32.2	33.9	118	34.8	35.6	29.6	115

[a] X^2 test between those who have vs. haven't sighted bear is significant at $p \geq .95$ for this bear range.

Table E-11. FUTURE BEAR POPULATION TREND DESIRED BY RESIDENT LANDOWNERS, BY PERSONAL SIGHTINGS AND BEAR RANGE

Bear Range / Personal Sightings	Bear Population Trend Desired			N
	Increase	No Increase	Don't Know	
	Percent			
Northern Occupied[a]				
Sighted	79.8	10.1	10.1	89
Haven't Sighted	63.1	14.1	22.8	92
TOTAL	71.2	12.2	16.6	181
Northern Unoccupied[a]				
Sighted	71.4	14.3	14.3	63
Haven't Sighted	48.9	22.2	28.9	180
TOTAL	54.7	20.2	25.1	243
Southern Occupied[a]				
Sighted	73.2	17.6	9.2	119
Haven't Sighted	55.8	17.1	27.1	70
TOTAL	66.6	17.5	15.9	189
Southern Unoccupied				
Sighted	62.2	6.7	31.1	45
Haven't Sighted	53.7	17.4	28.9	121
TOTAL	56.0	14.5	29.5	166

[a] χ^2 test between those who have vs. haven't sighted bear is significant at $p \geq .95$ for this bear range.

Table E-12. FUTURE BEAR POPULATION TREND DESIRED BY ABSENTEE LANDOWNERS, BY PERSONAL SIGHTINGS AND BEAR RANGE

Bear Range / Personal Sightings	Bear Population Trend Desired			N
	Increase	No Increase	Don't Know	
	Percent			
Northern Occupied[a]				
Sighted	75.8	11.3	12.9	62
Haven't Sighted	53.8	18.9	27.3	132
TOTAL	60.8	16.5	22.7	194
Northern Unoccupied[a]				
Sighted	85.3	8.8	5.9	34
Haven't Sighted	54.6	16.0	29.4	194
TOTAL	59.2	14.9	25.9	228
Southern Occupied				
Sighted	64.4	10.2	25.4	59
Haven't Sighted	49.0	16.7	34.3	102
TOTAL	54.6	14.3	31.1	161
Southern Unoccupied[a]				
Sighted	65.6	17.2	17.2	29
Haven't Sighted	37.0	17.6	45.4	108
TOTAL	43.1	17.5	39.4	137

[a] χ^2 test between those who have vs. haven't sighted bear is significant at $p \geq .95$ for this bear range.

Table E-13. PROXIMITY OF BEAR SIGHTINGS DESIRED BY RESIDENT LANDOWNERS, BY PERSONAL SIGHTINGS AND BEAR RANGE

Bear Range / Personal Sightings	Location of Bear Sightings Desired: On Own Property	Near Own Property	On Nearby Undeveloped Land	In Remote Areas of the Catskill Mts.	Never	N
	Percent					
Northern Occupied						
Sighted	51.7	5.6	23.6	14.6	4.5	89
Haven't Sighted	41.5	3.2	20.2	22.3	12.8	94
TOTAL	46.4	4.4	21.9	18.6	8.7	183
Northern Unoccupied[a]						
Sighted	48.5	10.9	14.1	15.6	10.9	64
Haven't Sighted	30.9	5.1	17.4	32.6	14.0	178
TOTAL	35.6	6.6	16.5	28.1	13.2	242
Southern Occupied[a]						
Sighted	60.8	9.2	12.5	13.3	4.2	120
Haven't Sighted	38.0	12.7	18.3	12.7	18.3	71
TOTAL	52.3	10.5	14.7	13.1	9.4	191
Southern Unoccupied						
Sighted	40.9	11.4	25.0	18.2	4.5	44
Haven't Sighted	30.3	4.9	20.5	28.7	15.6	122
TOTAL	33.1	6.6	21.7	25.9	12.7	166

[a] χ^2 test between those who have vs. haven't sighted bear is significant at $p \geq .95$ for this bear range.

Table E-14. PROXIMITY OF BEAR SIGHTINGS DESIRED BY ABSENTEE LANDOWNERS, BY PERSONAL SIGHTINGS AND BEAR RANGE

Bear Range / Personal Sightings	Location of Bear Sightings Desired: On Own Property	Near Own Property	On Nearby Undeveloped Land	In Remote Areas of the Catskill Mts.	Never	N
	Percent					
Northern Occupied[a]						
Sighted	55.9	10.2	10.2	16.9	6.8	59
Haven't Sighted	29.3	11.3	18.8	27.8	12.8	133
TOTAL	37.6	10.9	16.1	24.5	10.9	192
Northern Unoccupied						
Sighted	58.9	0.0	23.5	14.7	2.9	34
Haven't Sighted	38.1	3.1	19.1	29.4	10.3	194
TOTAL	41.3	2.6	19.7	27.2	9.2	228
Southern Occupied[a]						
Sighted	55.9	5.1	18.6	13.6	6.8	59
Haven't Sighted	32.7	6.7	13.5	24.0	23.1	104
TOTAL	41.2	6.1	15.3	20.2	17.2	163
Southern Unoccupied[a]						
Sighted	46.7	13.3	10.0	26.7	3.3	30
Haven't Sighted	22.2	2.8	20.4	32.4	22.2	108
TOTAL	27.5	5.1	18.1	31.2	18.1	138

[a] χ^2 test between those who have vs. haven't sighted bear is significant at $p \geq .95$ for this bear range.

Table E-15. LEVEL OF NUISANCE ACTIVITY ACCEPTABLE TO RESIDENT LANDOWNERS, BY PERSONAL SIGHTINGS AND BEAR RANGE

Bear Range / Personal Sightings	Acceptable Annual Nuisance Activity: None	Annoyance, no $ loss	Less than $100 loss	$100-300 loss	More Than $300 loss	Total N
	Percent					
Northern Occupied[a]						
Sighted	12.2	35.6	37.7	6.7	7.8	90
Haven't Sighted	19.8	45.4	17.4	11.6	5.8	86
TOTAL	15.9	40.4	27.8	9.1	6.8	176
Northern Unoccupied[a]						
Sighted	11.3	48.4	30.6	1.6	8.1	62
Haven't Sighted	28.7	42.7	22.2	2.9	3.5	171
TOTAL	24.0	44.2	24.5	2.6	4.7	233
Southern Occupied[a]						
Sighted	12.4	47.7	31.9	5.3	2.7	113
Haven't Sighted	32.9	37.1	27.1	2.9	0.0	70
TOTAL	20.2	43.7	30.1	4.4	1.6	183
Southern Unoccupied						
Sighted	13.6	50.1	27.3	4.5	4.5	44
Haven't Sighted	31.6	37.6	23.9	2.6	4.3	117
TOTAL	26.7	41.1	24.8	3.1	4.3	161

[a] X^2 test between those who have vs. haven't sighted bear is significant at $p \geq .95$ for this bear range.

Table E-16. LEVEL OF NUISANCE ACTIVITY ACCEPTABLE TO ABSENTEE LANDOWNERS, BY PERSONAL SIGHTINGS AND BEAR RANGE

Bear Range / Personal Sightings	Acceptable Annual Nuisance Activity: None	Annoyance, no $ loss	Less Than $100 loss	$100-300 loss	More Than $300 Loss	Total N
	Percent					
Northern Occupied						
Sighted	8.6	48.3	31.0	6.9	5.2	58
Haven't Sighted	18.2	45.5	26.5	5.3	4.5	132
TOTAL	15.3	46.3	27.9	5.8	4.7	190
Northern Unoccupied						
Sighted	5.9	44.1	41.2	8.8	0.0	34
Haven't Sighted	19.4	42.9	30.4	4.7	2.6	191
TOTAL	17.3	43.2	32.0	5.3	2.2	225
Southern Occupied						
Sighted	14.0	45.6	29.8	8.8	1.8	57
Haven't Sighted	31.1	41.7	24.3	1.9	1.0	103
TOTAL	25.0	43.1	26.3	4.4	1.3	160
Southern Unoccupied						
Sighted	13.3	40.0	43.4	3.3	0.0	30
Haven't Sighted	31.7	34.7	27.9	3.8	1.9	104
TOTAL	27.6	35.9	31.3	3.7	1.5	134

Table E-17. IMPORTANCE TO RESIDENT LANDOWNERS OF MAINTAINING A POPULATION OF BLACK BEARS IN THE CATSKILLS, BY PERSONAL SIGHTINGS AND BEAR RANGE

Bear Range / Personal Sightings	Importance Indicator: Protect habitat with land use regulations	Balance bear-human land needs	Only if no conflicts with human needs	Human needs more important than bears	Total N
	Percent				
Northern Occupied					
Sighted	48.9	33.0	13.6	4.5	88
Haven't Sighted	32.2	38.0	26.4	3.4	87
TOTAL	40.6	35.4	20.0	4.0	175
Northern Unoccupied					
Sighted	27.4	41.9	22.6	8.1	62
Haven't Sighted	25.9	41.4	26.4	6.3	174
TOTAL	26.3	41.5	25.4	6.8	236
Southern Occupied					
Sighted	34.7	44.2	18.6	2.5	118
Haven't Sighted	32.8	37.4	17.9	11.9	67
TOTAL	34.1	41.6	18.4	5.9	185
Southern Unoccupied					
Sighted	28.9	48.9	17.8	4.4	45
Haven't Sighted	35.5	43.0	16.5	5.0	121
TOTAL	33.7	44.6	16.9	4.8	166

Table E-18. IMPORTANCE TO ABSENTEE LANDOWNERS OF MAINTAINING A POPULATION OF BLACK BEARS IN THE CATSKILLS, BY PERSONAL SIGHTINGS AND BEAR RANGE

Bear Range / Personal Sightings	Importance Indicator: Protect habitat with land use regulations	Balance bear-human land needs	Only if no conflicts with human needs	Human needs more important than bears	Total N
	Percent				
Northern Occupied					
Sighted	50.8	36.1	11.5	1.6	61
Haven't Sighted	35.9	36.7	22.1	5.3	131
TOTAL	40.5	36.5	18.8	4.2	192
Northern Unoccupied					
Sighted	44.1	41.2	11.8	2.9	34
Haven't Sighted	36.4	40.0	20.9	2.7	187
TOTAL	37.6	40.2	19.5	2.7	221
Southern Occupied					
Sighted	37.3	42.3	15.3	5.1	59
Haven't Sighted	34.3	37.4	19.2	9.1	99
TOTAL	35.4	39.3	17.7	7.6	158
Southern Unoccupied					
Sighted	40.0	36.7	20.0	3.3	30
Haven't Sighted	34.6	39.3	16.8	9.3	107
TOTAL	35.8	38.7	17.5	8.0	137

Table E-19. ATTITUDES OF RESIDENT LANDOWNERS TOWARD THE BEHAVIOR OF BLACK BEAR, BY PERSONAL SIGHTINGS AND BEAR RANGE

Bear Range / Personal Sightings	Attitude Toward Black Bear: Timid	Seldom Damage	Often Damage	Menace	Not Familiar with Bears	Total N
	Percent					
Northern Occupied[a]						
Sighted	55.1	24.7	2.2	3.4	14.6	89
Haven't Sighted	42.0	15.8	0.0	1.1	41.1	95
TOTAL	48.3	20.1	1.1	2.2	28.3	184
Northern Unoccupied[a]						
Sighted	46.9	25.0	0.0	3.1	25.0	64
Haven't Sighted	24.0	22.9	1.7	3.4	48.0	179
TOTAL	30.0	23.5	1.2	3.3	42.0	243
Southern Occupied[a]						
Sighted	37.2	47.0	1.7	1.7	12.4	121
Haven't Sighted	31.0	23.9	1.4	0.0	43.7	71
TOTAL	34.9	38.5	1.6	1.0	24.0	192
Southern Unoccupied[a]						
Sighted	38.6	34.1	0.0	2.3	25.0	44
Haven't Sighted	22.6	21.8	1.6	1.6	52.4	124
TOTAL	26.8	25.0	1.2	1.8	45.2	168

[a] X^2 test between those who have vs. haven't sighted bear is significant at $p \geq .95$ for this bear range.

Table E-20. ATTITUDES OF ABSENTEE LANDOWNERS TOWARD THE BEHAVIOR OF BLACK BEAR, BY PERSONAL SIGHTINGS AND BEAR RANGE

Bear Range / Personal Sightings	Attitude Toward Black Bear: Timid	Seldom Damage	Often Damage	Menace	Not Familiar with Bears	Total N
	Percent					
Northern Occupied[a]						
Sighted	38.7	35.5	0.0	3.2	22.6	62
Haven't Sighted	23.0	23.0	1.5	1.5	51.0	135
TOTAL	27.9	26.9	1.0	2.0	42.2	197
Northern Unoccupied[a]						
Sighted	32.4	44.1	2.9	0.0	20.6	34
Haven't Sighted	23.6	17.6	2.0	1.0	55.8	199
TOTAL	24.9	21.5	2.1	0.9	50.6	233
Southern Occupied[a]						
Sighted	31.1	42.6	3.3	6.6	16.4	61
Haven't Sighted	16.3	21.2	2.9	0.0	59.6	104
TOTAL	21.8	29.1	3.0	2.4	43.7	165
Southern Unoccupied[a]						
Sighted	23.3	53.4	3.3	0.0	20.0	30
Haven't Sighted	14.5	16.4	1.8	2.7	64.5	110
TOTAL	16.4	24.3	2.1	2.1	55.1	140

[a] X^2 test between those who have vs. haven't sighted bear is significant at $p \geq .95$ for this bear range.

Table E-21. RESIDENT LANDOWNERS' ASSESSMENTS OF THE EFFECTS OF DOUBLING THE BLACK BEAR POPULATION, BY PERSONAL SIGHTINGS AND BEAR RANGE

Bear Range / Personal Sightings	Would doubling the bear population... Increase Nuisance? No	Yes	Don't Know	Total N	Increase Safety Risks? No	Yes	Don't Know	Total N	Increase Bear-Vehicle Accidents? No	Yes	Don't Know	Total N
	Percent				Percent				Percent			
Northern Occupied												
Sighted	60.0	21.3	18.7	75	72.2	13.9	13.9	72	61.1	22.2	16.7	72
Haven't Sighted	40.0	33.3	26.7[a]	75	58.9	23.3	17.8	73	39.7	39.7	20.6[a]	73
TOTAL	50.0	27.3	22.7	150	65.5	18.6	15.9	145	50.4	31.0	18.6	145
Northern Unoccupied												
Sighted	38.5	44.2	17.3	52	57.4	24.1	18.5	54	43.4	37.7	18.9	53
Haven't Sighted	25.5	46.6	27.9	165	47.6	26.8	25.6	164	34.4	35.5	30.1	163
TOTAL	28.6	46.1	25.3	217	50.0	26.1	23.9	218	36.6	36.1	27.3	216
Southern Occupied												
Sighted	45.4	28.3	26.3	99	65.6	17.2	17.2	99	53.1	29.2	17.7	96
Haven't Sighted	37.7	32.8	29.5	61	50.8	17.5	31.7	63	37.7	29.5	32.8	61
TOTAL	42.5	30.0	27.5	160	59.9	17.3	22.8	162	47.1	29.3	23.6	157
Southern Unoccupied												
Sighted	36.8	44.8	18.4	38	69.3	25.6	5.1	39	39.5	31.6	28.9	38
Haven't Sighted	27.5	41.3	31.2	109	43.1	22.0	34.9[a]	109	30.2	30.2	39.6	106
TOTAL	29.9	42.2	27.9	147	50.0	23.0	27.0	148	32.6	30.6	36.8	144

[a] X^2 test between those who have vs. haven't sighted bear is significant at $p \geq .95$ for this bear range.

Table E-22. ABSENTEE LANDOWNERS' ASSESSMENTS OF THE EFFECTS OF DOUBLING THE BLACK BEAR POPULATION, BY PERSONAL SIGHTINGS AND BEAR RANGE

Bear Range / Personal Sightings	Would doubling the bear population... Increase Nuisance? No	Yes	Don't Know	Total N	Increase Safety Risks? No	Yes	Don't Know	Total N	Increase Bear-Vehicle Accidents? No	Yes	Don't Know	Total N
	Percent				Percent				Percent			
Northern Occupied												
Sighted	37.3	50.9	11.8	51	55.8	26.9	17.3	52	58.8	29.4	11.8	51
Haven't Sighted	23.1	46.3	30.6[a]	121	40.0	29.6	30.4	125	32.2	33.9	33.9[a]	121
TOTAL	27.3	47.7	25.0	172	44.6	28.8	26.6	177	40.1	32.6	27.3	172
Northern Unoccupied												
Sighted	35.4	32.3	32.3	31	53.4	23.3	23.3	30	56.6	16.7	26.7	30
Haven't Sighted	25.3	46.0	28.7	178	42.4	27.4	30.2	179	38.3	32.6	29.1	175
TOTAL	26.8	44.0	29.2	209	44.0	26.8	29.2	209	41.0	30.2	28.8	205
Southern Occupied												
Sighted	35.2	40.7	24.1	54	58.9	26.8	14.3	56	37.5	28.6	33.9	56
Haven't Sighted	23.2	43.1	33.7	95	40.0	31.6	28.4[a]	95	34.4	25.8	39.8	93
TOTAL	27.5	42.3	30.2	149	47.0	29.8	23.2	151	35.6	26.8	37.6	149
Southern Unoccupied												
Sighted	34.6	42.3	23.1	26	57.1	14.3	28.6	28	50.0	19.2	30.8	26
Haven't Sighted	17.2	54.8	28.0	93	26.7	37.7	35.6[a]	90	30.3	40.5	29.2	89
TOTAL	21.0	52.1	26.9	119	33.9	32.2	33.9	118	34.8	35.6	29.6	115

[a] X^2 test between those who have vs. haven't sighted bear is significant at $p \geq .95$ for this bear range.